SNIPER AND SPECIAL PURPOSE RIFLES

ARMENIA

5.45 mm K-11 sniper rifle

Description

As with the 5.45 mm K-3 assault rifle (see separate entry) the 5.45 mm K-11 sniper rifle was first revealed in October 1996. Unlike the K-3, the K-11 is a manual bolt-action rifle although it utilises many K-3 components, including the same barrel and the detachable 30-round curved box magazine. It is one of the few rifles produced intended to utilise the 5.45 × 39 mm cartridge for the sniper role, although the maximum effective range of the K-11 is stated to be limited to 600 m.

Unlike the K-3, most of the furniture of the K-11 is wood. The butt-stock has a skeleton outline and provides a pistol grip for the firer. A non-adjustable bipod is a standard attachment. Iron sights are provided, although a 1H01 × 4 telescopic sight is employed for the sniper role. One further optical option is a 1P29 sight. Both the 1H01 and 1P29 sights are manufactured in Armenia. The K-11 can be fitted with a sling. If required, a suppressor may be fitted over the muzzle.

Little has been heard of the K-11 since its 1996 debut and it may be that the project is either on hold or has been terminated for lack of funding.

Specifications

Cartridge: 5.45 × 39 mm
Operation: bolt-action repeater

5.45 mm K-11 sniper rifle fitted with × 4 1H01 telescopic sight and suppressor (T J Gander)

Feed: 30-round box magazine
Weight: with bipod and without sight, 3.5 kg
Length: 920 mm
Barrel: 415 mm
Rifling: 4 grooves, rh, 1 turn in 196 mm
Sights: fore, adjustable post; rear, U-notch tangent; × 4 telescopic sight
Muzzle velocity: 900 m/s
Max effective range: 600 m

Manufacturer

Ministry of Defence, Military Industrial Department, Chaush Street 60, Yerevan, Armenia.

Status

Stated to be at preproduction stage in 1996 but nothing heard of since.

UPDATED

AUSTRALIA

Precision Rifle Systems ATAS sniper rifles

Description

Precision Rifle Systems ATAS sniper rifles comprise a series of bolt action rifles configured to meet the users' requirements. For instance, the bolt action may involve three forward or rear locking lugs, the ammunition feed may be either single shot or from a 6-round box magazine. The magazine may be located either on the left-hand side of the rifle, in the conventional position under the receiver, or on the right.

The ammunition fired is also a variable. Although optimised for 7.62 × 51 mm NATO, almost any cartridge can be catered for up to 12.7 × 99 mm/0.50 Browning (see entry in Anti-matériel rifles section for details of the latter). Barrels are manufactured by Tobler with a muzzle brake as an optional fitting. The optical sights are again according to the users' choice, mounted on an integral dovetail machined into the top of the receiver. Triggers are fully adjustable in weight, engagement and travel.

Receivers are designed and manufactured to maximise the total locking area. Materials used are 4140 chromium molybdenum steel, 1040 steel, or 410/420 Inox (stainless steel) depending on the action type, function or user definition. The bolt action and receiver interlock with either the machined alloy or steel stock sub-frame

Manufacturer

Precision Rifle Systems and Associates, 1 Pitt Street, Bundaberg, Queensland 4670.

Status

Available as required.

NEW ENTRY

A typical Precision Rifle Systems ATAS sniper rifled chambered for 0.308 Norma Magnum ammunition and with side-mounted magazine ***NEW***/0109816

AUSTRIA

Steyr Scout Tactical 7.62 mm rifle

Development

The Steyr Scout Tactical 7.62 mm rifle was designed by Colonel Jeff Cooper of the USA in collaboration with Steyr Mannlicher AG & Co KG and introduced to the market in late 1997. It is an innovative, multipurpose bolt action rifle with various military and para-military applications, but the one that will probably be most favoured is as a back-up rifle carried by the second member of a sniper team.

During 2000, the first demonstrations of a police and para-military model, the Tactical Elite – SBS 96L, were made. For outline details of this models see under Variant in this entry.

Description

The Steyr Scout Tactical bolt action rifle is chambered for the 7.62 × 51 mm NATO (0.308 Winchester) cartridge and is also available in 5.56 × 45 mm. It is built around the Steyr Safe Bolt System (SBS) and a fluted, cold hammer-forged barrel 483 mm long.

The SBS is controlled by an ambidextrous roller tang mounted on top of the small of the butt so that it is visible at all times. The safety has three positions; Fire, Loading and Safe. In the Fire mode a red dot is visible and the rifle is ready to fire. In the Loading position a white dot is visible to denote that the trigger safety is engaged. In the Safe position the white dot and a grey safety catch are visible, denoting that the rifle will not fire and the bolt will not open. In the Safe position the bolt handle can be moved to a Double Lock/Safe position to lock the firing pin. Other safety features include a safety bushing on the receiver to encase the extractor, providing an extra safety margin in the event of excessive chamber pressures; front locking lugs provide increased reliability should this happen. Grooves on the bolt ensure a smooth bolt action even in severe freezing and other adverse conditions.

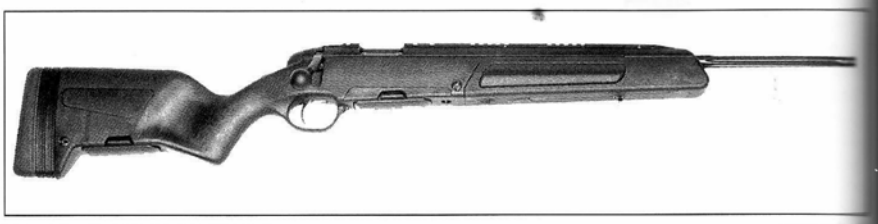
The stock is formed using Zytel, a synthetic material with a non-slip neutral grey finish (other colours and camouflage finishes can be provided). The forward part of the stock features an integral fold-away bipod while a storage compartment under the butt can accommodate a spare five-round magazine. The butt-stock length can be adjusted to suit individual firers by

the introduction or removal of modular butt-stock spacers; two spacers are provided with each rifle with others available as optional extras. The adjustable trigger pull is factory set to between 1.6 and 1.8 kg.

The standard sight is a factory-installed Leupold M8 2.5 × 28 mm intermediate eye relief Scout Scope with a heavy duplex reticle. It is forward-mounted over the receiver which extends forward over the barrel and clear of the ejection port. This arrangement provides maximum eye relief and complete binocular vision for rapid target acquisition. The Scout Scope weighs 213 g, is 256.5 mm long and is housed in a 25.4 mm tube. A Picatinny style rail system can accommodate Weaver pattern mounts for the Scout Sight or other optical sights. The rail system includes a reserve folding 'ghost ring' sight.

The magazine is made from black 'Grivory', a synthetic material. While the standard detachable magazine holds five rounds, it can be replaced by one holding ten. When not in use the spare magazine can be held in the storage space under the stock. If required, the magazine can be located in a drop-lock position to allow single round loading.

Each Scout Tactical rifle is provided with a 25.4 mm wide leather Scout sling. There are three flush sling sockets for rapid-detach swivels, allowing the sling to be adjusted to suit almost any firing or carrying position. An underside rail beneath the forestock can be used to attach combat accessories. A hard transport case is available.

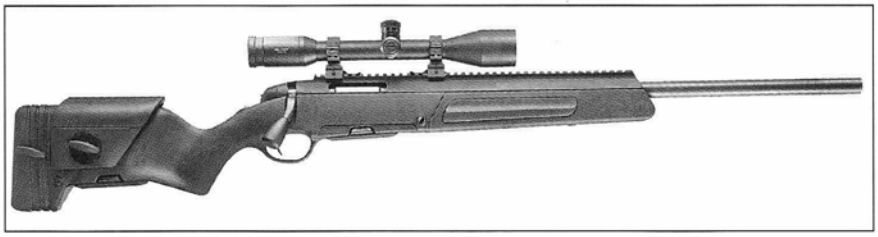


Steyr Scout Tactical 7.62 mm rifle ***NEW***/0143170

Variant

Tactical Elite – SBS 96L

This police and para-military model has a heavier barrel than the basic Scout Tactical rifle but utilises the same bolt action and general principles. The butt-stock has been provided with adjustable cheek rest and butt spacers to suit individual user requirements. No sights are provided as the entire length of the upper receiver is used to locate a length of MIL-STD-1913 rail to enable users to attach optical or night sights as required. A five-round magazine is provided. Two barrel lengths are offered, 508 mm and 570 mm. Total weight (7.62 mm, empty) is 4.25 kg. This rifle is also available chambered for either 7.62 × 51 mm NATO or 5.56 × 45 mm.



Steyr Tactical Elite 7.62 mm rifle ***NEW***/0143167

Specifications

Scout Tactical

Cartridge: 7.62 × 51 mm NATO (0.308 Winchester) or 5.56 × 45 mm
Operation: bolt action, single shot
Locking: rotating bolt
Feed: 5-round box magazine
Weight: with scope, ca 3.3 kg
Length: 1 m
Barrel: 483 mm
Rifling: 4 grooves, rh, 1 turn in 304.8 mm
Sights: Leupold M8 2.5 × 28 mm intermediate eye relief Scout Scope; reserve, foldaway ghost ring

Manufacturer

Steyr-Mannlicher AG & Co KG, Postfach 1000, A-4400 Steyr.

Status

In production.

UPDATED

Steyr 7.62 mm SSG sniper rifles

Description

The Steyr 7.62 mm SSG is the standard sniper rifle for the Austrian Army under the designation Scharfschützengewehr 69 (SSG 69).

The barrel is made by the cold forging process, originally developed by Steyr and now used by many barrel makers, which results in work-hardening both the bore and the outside surface of the barrel. It also allows, as in the case of the SSG 69, a slightly tapered bore.

The bolt is manually operated and moves through 60°. It has six rotating locking lugs, symmetrically arranged in pairs, set at the rear. The trigger mechanism gives a double pull. The length and weight of the pull are both adjustable externally. The safety catch on the top right of the rear of the receiver is of the sliding type, locking the bolt and the firing pin.

The standard magazine, holding five rounds, is the rotating spool type which has been used on Mannlicher sporting and military rifles for many years. The stock is made of a synthetic material. It can be adjusted for length by the addition or removal of a butt pad.

The receiver has a longitudinal rib machined on the top. Mounts, which are available for all types of sight, can be fixed to this rib. The standard sights are the Hensoldt 10 × 42 ZF 500 or ZF 800 attached by NATO standard quick-detachable mounts. There are also iron sights brazed on to the barrel for emergency use (police models do not have fixed sights and rely on optical sights only). All electro-optic sighting devices may be mounted.

For marketing purposes there are four SSG models:

SSG-P1 is the base SSG 69 rifle; olive green stock.

SSG-PII is specifically tailored for police marksman duties and has a heavier barrel; weight empty without optical sight is 4.25 kg. At one time known as the SSG-P. There are no fixed sights. Black stock.

SSG-PIIK is basically the same as the SSG-PII but with a shorter (508 mm) barrel. Weight with optical sight is 4.8 kg.

SSG-PIV is based on the SSG-PII but with a 409 mm heavy barrel with the muzzle threaded to accommodate a flash hider or a suppressor. Weight empty without optical sight is 3.8 kg.

7.62 mm SSG-P1 sniper rifle

Specifications

SSG-P1

Cartridge: 7.62 × 51 mm
Operation: bolt action, single shot
Locking: rotating bolt
Feed: 5-round rotary magazine
Weight: empty, ca 4 kg
Length: 1.14 m
Barrel: 650 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: Hensoldt 10 × 42 telescope; iron sights, fore, blade; rear, V-notch
Muzzle velocity: 860 m/s
Max effective range: 800 m

Manufacturer

Steyr-Mannlicher AG & Co KG, Postfach 1000, A-4400 Steyr.

Status

In production.

Service

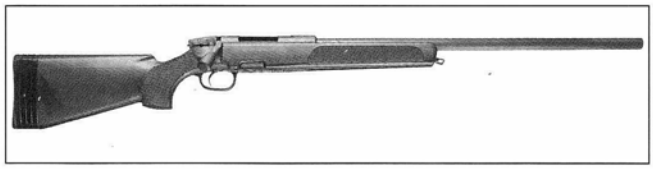
Austrian Army and several foreign police and military forces.

Similar models

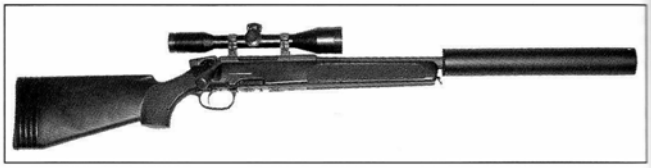
GREECE

Manufacturer: Hellenic Arms Industry (EBO) SA
Type: 7.62 mm Kefefs
Remarks: The Kefefs-M, intended for military service, has a heavy barrel and synthetic material furniture; weight is 5.45 kg. The Kefefs-P uses wood furniture and weighs 4.75 kg.

UPDATED



7.62 mm Steyr SSG-PII Police model ***NEW***/0143169



7.62 mm Steyr SSG-PIV suppressed rifle ***NEW***/0143168

ERMA SR 100 heavy sniper rifle

Development

At the beginning of 1998, the complete small arms range manufactured by ERMA of Suhl, was taken over by the Suhler und Sportwaffen GmbH (SUHL – 51 per cent owned by Steyr-Mannlicher AG & Co KG). Distribution was continued by SUHL, although the ERMA SR 100 heavy sniper rifle was produced by Steyr in Austria and distributed in co-ordination with SUHL. Production is now complete.

The ERMA SR 100 was available for four cartridges: 0.308 Winchester; 0.308 Winchester Match for competition shooting; 0.300 Winchester Magnum; and 0.338 Lapua Magnum. A further round, the 12.7 × 53 mm Suppressed (Anthis) was also planned. One feature of the ERMA SR 100 was that it was possible to switch from one size of cartridge to another simply by changing the barrel, bolt and magazine.

Description

The ERMA SR 100 heavy sniper rifle is of advanced design to produce optimum accuracy. The bolt action is centred around a three lug bolt which locks directly into the barrel after a bolt rotation of 60°. The barrel is seated clearance-free in the receiver and is fixed using an eccentric pivot. In its turn the forged aluminium alloy receiver is seated clearance-free in an aluminium block firmly fixed into the laminated wood stock.

Using a cam lever on the left of the rifle to move the eccentric pivot barrel locking system, it is possible to alter the calibre by replacing the barrel, bolt and magazine. Suppressed barrels are available.

Barrels feature a multiport muzzle brake which also acts as a flash hider. Barrel lengths vary according to the type of ammunition in use, as do the magazine capacities. For 0.308 Winchester the box magazine can hold 10 rounds in a staggered pattern. For 0.300 Winchester Magnum the capacity is reduced to eight, while for 0.338 Lapua Magnum it is five rounds.

The match trigger has an integral drop safety and is adjustable for trigger slack, slack weight, and position as well as trigger pull (between 500 g and 3 kg). There is a three position safety having a direct effect on the firing pin.

The stock is ergonomically adjustable to suit individual firers. The butt-plate is adjustable for length and height, there is an adjustable cheek piece, while an adjustable height rack and pinion 'third leg' can be lowered from under the butt-stock when the front-mount bipod is in use. The thumbhole match stock is suitable for both right- and left-handed firers and features a hand stop, as does the forward part of the contoured fore-end. The stock houses aluminium rails for a sling and for mounting the detachable bipod; sling swivels can be mounted on the right, left or below, as required.

The optical sight is left to the user's choice. Sight mounts can be either fixed or detachable and there is provision for mounting night sights on an attachment rail. Also available as options are fully adjustable iron peep sights for match shooting, and an extending mirage deflector over the barrel.

Specifications

Cartridge: 0.308 Winchester (7.62 × 51 mm NATO); 0.300 Winchester Magnum; 0.338 Lapua Magnum (see also text)
Operation: bolt action, single shot
Locking: 3-lug rotating bolt
Feed: 0.308 Winchester, 10-round box magazine; 0.300 Winchester Magnum, 8-round box magazine; 0.338 Lapua Magnum, 5-round box magazine
Weight: with scope and magazine: 0.308 Winchester, ca 7.9 kg; 0.300 Winchester Magnum and 0.338 Lapua Magnum, ca 7.81 kg
Length: 0.308 Winchester, 1.245 m; 0.300 Winchester Magnum and 0.338 Lapua Magnum, 1.345 m; with barrel removed, 850 mm
Barrel: 0.308 Winchester, 725 mm; 0.300 Winchester Magnum and 0.338 Lapua Magnum, 825 mm
Rifling: 0.308 Winchester, 4 grooves, rh, 1 turn in 304.8 mm; 0.300 Winchester Magnum and 0.338 Lapua Magnum, 6 grooves, rh, 1 turn in 254 mm
Sights: as required

Manufacturer

Steyr-Mannlicher AG & Co KG, Postfach 1000, A-4400 Steyr.

Status

Production complete.

UPDATED

ERMA SR 100 heavy sniper rifle (T J Gander) 0053910

BRAZIL

IMBEL 0.22 training rifles

Description

These rifles are replicas of the light 7.62 mm calibre automatic rifle (Fabrique Nationale's FN FAL) in terms of size and weight but they fire the cheaper 0.22 rimfire cartridge. Rather than offering a conversion kit for service rifles, these training weapons are factory made in the smaller calibre. There are three versions available: the MD2A1 automatic and semi-automatic (FAL); the MD3 in semi-automatic with fixed butt; and the MD4 in semi-automatic and folding butt. In all cases the 10-round 0.22 calibre non-removable magazine fits inside a false FAL magazine; the cocking handle is on the left of the receiver and the rifle is used in exactly the same manner as the 7.62 mm version.

Specifications

Cartridge: 0.22 LR rimfire
Operation: blowback, selective fire
Feed: 10-round box magazine
Weight: 4.14 kg

Manufacturer

Indústria de Material Bélico do Brasil – IMBEL, Av 15 de Março – Casa 1, Vila Estrela, CEP 12620-000, Piquete-SP.

Status

In production. Prototypes have been evaluated by the Brazilian Army and the rifle is available for export.

UPDATED

IMBEL 0.22 in MD2A1 training rifle

IMBEL 0.22 MD2A1 training rifle, showing cocking handle and a top view of the

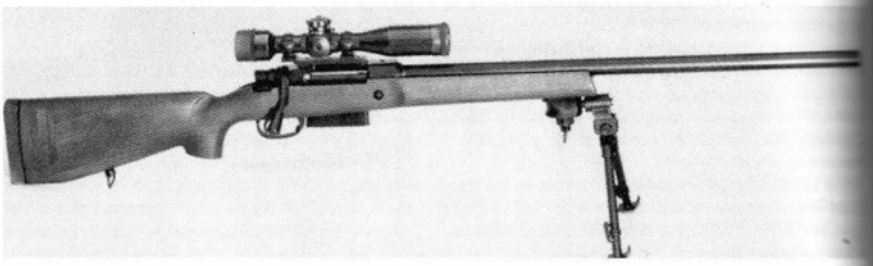
CANADA

C3 and C3A1 7.62 mm sniper rifles

Description

The Canadian sniper rifle, the C3, is the British Parker-Hale Model 82 modified slightly to meet Canadian requirements. The stock is fitted with four 12.7 mm spacers to permit length adjustment. The rifle has two male dovetail blocks on the receiver, to accept either the Parker-Hale 5E vernier rearsight, or the Austrian Kahles × 6 telescope. All exposed metal parts of the rifle are non-reflective.

The Canadian Department of Defence later adopted a revised version of the C3 rifle which was redesignated C3A1. The rifle incorporates a number of changes from the earlier C3 model which entered Canadian service in the mid-1970s. The stock configuration remained unchanged but major alterations were made to the action body which was strengthened and equipped with a six-round capacity steel box magazine with a release catch located in the leading edge of the trigger guard. The trigger mechanism has a redesigned safety catch and is of all-steel construction. Rifling specifications were changed to provide optimum performance from both standard NATO 7.62 × 51 mm ball and heavier bullets which have been developed for sniping and competition use. A Parker-Hale bipod is provided which attaches to a handstop assembly. The bipod has extendable legs, allows approximately 14° of swivel and cant, and can be folded either forward or back in addition to being hand detachable.



7.62 mm C3A1 sniper rifle

The telescope sight, which was specifically designed for use in conjunction with the C3A1 rifle, is a × 10 magnification Unertl model similar to that adopted by the US Marine Corps. The body and controls are of all-steel construction and the consequent mass requires specially reinforced mounts which have been designed to withstand a very high degree of stress.

The bolt handle was modified by the addition of an aluminium extension knob which provides easier purchase with a gloved hand and greater clearance from the telescope sight than was the case with the C3 model.

Specifications

C3A1
Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 6-shot box magazine
Weight: empty, with Unertl sight, 6.3 kg
Length: 1.14-1.21 m
Barrel: 660 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm

Manufacturer

Parker-Hale Limited, Bisley Works, Golden Hillock Road, Birmingham B11 2PZ, UK.

Status

Production complete.

Service

Entered service with Canadian Armed Forces in 1989.

UPDATED

Diemaco 5.56 mm C7CT rifle

Description

The Diemaco 5.56 mm C7CT is a semi-automatic rifle used to effectively engage targets to ranges out to 600 m. In effect, it is a custom-built version of the C7 assault rifle that can be configured to a range of customer requirements to suit a tactical requirement. The data provided is only an indication for this rifle.

The Diemaco C7CT incorporates a bipod and an unchromed, floating, hammer-forged heavy barrel. Various rifling twists can be provided. A removable noise and flash suppressor is secured at the muzzle. The butt stock is provided with a removable weight to counterbalance the additional weight of the heavy barrel. A contoured pistol grip and butt stock enhance shooter comfort. The bipod and sling are attached to the tubular hand guard and do not influence the barrel. A Weaver sight rail is located over the receiver. Optical sights are according to customer preference; there are no iron sights.

Internally, the bolt carrier assembly has a titanium firing pin for faster locking time. There is also a two stage trigger mechanism. Magazine capacities are 5, 10, 20 or 30 rounds.

A similar 5.56 mm C8CT rifle based on the Diemaco C8 carbine is also produced. The C8CT can be produced in many customer-specified configurations so no firm data can be quoted. An illustration is provided.

A typical Diemaco 5.56 mm C8CT rifle

NEW/0526024

Diemaco 5.56 mm C7CT rifle

NEW/0526014

Specifications

Calibre: 5.56 × 45 mm
Operation: gas, semi-automatic
Locking: rotating bolt
Feed: 5-, 10-, 20- or 30-round box magazines
Weight: empty, 4.3 kg; loaded, 4.8 kg
Length: 1 m
Barrel: 500 m
Rifling: 6 grooves, rh, 1 turn in 178, 216 or 229 mm
Sights: optical to choice.

Manufacturer

Diemaco, 1036 Wilson Avenue, Kitchener, Ontario N2C 1J3.

Status

Available.

Service

Canadian Forces, Norway and Denmark.

UPDATED

Diemaco 0.22 LR Small Bore Cadet rifle

Description

The Diemaco Small Bore Cadet rifle is an exact copy of the C7 assault rifle, manufactured to fire the 0.22 LR rimfire cartridge in the semi-automatic mode only. The Small Bore rifle is a primary marksmanship trainer for use by cadets, militia units and regular force units on indoor range facilities. The rifle features a barrel designed for the 0.22 LR projectile and a 10-round capacity magazine which fits within a standard 5.56 mm magazine body for total weapon handling practice. Many components of the C7 have been redesigned in plastics, including the complete lower receiver and butt-stock assembly, to make the Small Bore rifle less expensive to acquire.

A kit is also available to convert existing C7/M16 type rifles to Small Bore rifle standard.

Specifications

As C7 rifle, except:
Feed: 10-round box magazine
Rifling: rh twist, 1 turn in 406 mm

Manufacturer

Diemaco, 1036 Wilson Avenue, Kitchener, Ontario N2C 1J3.

CROATIA

EM 992 and EMM 992 sniper rifles

Description

The EM 992 and EMM 992 sniper rifles are basically similar bolt-operated repeater rifles which differ mainly in the ammunition fired and some dimensions. The EM 992 fires 0.308 Winchester (7.62 × 51 mm NATO) while the EMM 992 is chambered for 0.300 Winchester Magnum. The EM 992 has a detachable five round magazine while the magazine on the EMM 992 holds four rounds. Overall, the general impression given by these rifles is that they are sporting weapons modified for use by military and law enforcement agencies.

Both rifles have identical bolt actions with four locking lugs and a 90° bolt rotation. The trigger mechanism is described as having a 'new construction' and is adjustable between 5 and 30 N. A match standard barrel is used together with a multibaffle muzzle brake which, it is claimed, reduces recoil forces by 40 per cent. Laminated wood stocks are provided with the stock having a raised cheek rest. A Harris pattern adjustable bipod is located in front of the forestock and there is provision for a sling.

EM 992 7.62 mm sniper rifle

The standard optical sight is a Leupold Vari-X Target Police scope although back-up iron sights are provided. A passive night sight is optional. Accessories include an extra magazine, a cleaning and maintenance kit in a zip-fastened case and a waterproof carry case made from impregnated linen.

Specifications

Data for EM 992; where EMM 992 differs, shown in parenthesis

Cartridge: 7.62 × 51 mm (0.300 Winchester Magnum)
Operation: bolt action, single shot
Feed: 5-round box magazine (4-round box magazine)
Weight: 6.5 kg (6.6 kg)
Length: 1.215 m (1.245 m)
Barrel: 565 mm (580 mm)
Rifling: 4 grooves, rh, 1 twist in 305 mm (1 twist in 254 mm)
Sights: Leupold Vari-X 3.5–10 × 42 Target Police scope
Muzzle velocity: 870 m/s (1,035 m/s)
Max effective range: 900 m (1,200 m)

Marketing Agency

RH – ALAN doo, Stancicva 4, 10 000 Zagreb.

Status

Available.

Service

Croatian Army.

UPDATED

CZECH REPUBLIC

CZ 700 and 700 M1 7.62 mm SNIPER sniper rifles

Description

The CZ 700 7.62 mm SNIPER sniper rifle was developed from a competition rifle and was produced with two barrels, one for standard 0.308 Winchester (7.62 × 51 mm) ammunition and the other using 0.308 Winchester subsonic ammunition; the latter is surrounded by a jacket forming a sound suppressor. The two barrels are interchangeable, being screwed into the receiver headspace and secured by two screws.

The CZ 700 SNIPER is a repeating rifle with a manually operated rotary bolt locked by three axially located lugs arranged in two rows. The trigger is fully adjustable with a pull weight up to 20 N, together with adjustments for trigger travel before firing and lateral trigger positioning. An adjustable cheekpiece is provided on the butt-stock, as is a pistol type grip for the firing hand and a fully adjustable butt-plate. The butt-stock is laminated wood and can be supplied in a finish to suit user requirements.

The standard box magazine holds 10 rounds although a single cartridge magazine is available on request.

The CZ 700 SNIPER is no longer in production, having been replaced by the CZ 700 SNIPER M1. This appears to be basically the same rifle but with all furniture, originally manufactured using moulded synthetic materials, replaced by wood.

The optical sight is dependent on user requirements, as is the provision of a bipod. Each rifle can be supplied with two 10-round magazines, cleaning equipment and rod, dismantling tools, fabric band above the barrel, flash suppressor, headspace gauge and a transit case arranged to customer specifications.

CZ 700 0.308 Winchester SNIPER sniper rifles with suppressed version at bottom 0008221

Specifications

Data for standard CZ 700 SNIPER rifle; where suppressed version differs, shown in parentheses

Cartridge: 0.308 Winchester (0.308 Winchester subsonic)
Operation: bolt action, single shot
Feed: 10-round magazine
Weight: empty, with bipod and optics, 6.2 kg (empty, with sound suppressor, 6.7 kg)
Length: 1.215 m (1.23 m)
Barrel: 650 mm (450 mm)
Rifling: 4 grooves, rh, 1 turn in 305 mm (240 mm)
Sights: optical, to user requirements
Muzzle velocity: 150 g bullet, 905 m/s (200 g bullet, 324 m/s)
Muzzle energy: 3,980 J (680 J)

Manufacturer

Česká zbrojovka a.s., CZ-688 27 Uherský Brod.

Status

In production. Offered for export sales.

UPDATED

FINLAND

Sako TRG sniper rifles

Description

The Sako TRG is a conventional bolt-action repeating rifle, Sako being of the opinion that for first-round effectiveness and accuracy the bolt action cannot be bettered. Two versions are manufactured, the TRG 22, firing 0.308 Winchester (7.62 × 51 mm NATO) cartridges and the TRG 42, firing 0.338 (8.6 × 71 mm) Lapua Magnum cartridges. The TRG 42 is also available chambered for 0.300 Winchester Magnum. The TRG 22 and TRG 42 are improved models of the earlier TRG 21 and TRG 41, with improved stock adjustment, an improved muzzle brake and an improved bipod.

The free floating barrel is manufactured by the cold hammering method. The muzzle can be fitted with a detachable suppressor or a muzzle brake, both of which also act as efficient flash hiders.

The receiver is constructed of solid steel and also formed by cold hammering. The body is triangular with the bottom flat and the sides angled inwards, with flat outer surfaces and rounded inner guides for the bolt. It incorporates three locking lugs for maximum strength, while the bolt lift angle of 60° provides minimum bolt movement; an oversize bolt handle is provided for fast and easy operation. The receiver is stabilised with three fastening screws and utilises an oversized bedding surface onto an aluminium bedding block for additional rigidity. A 17 mm integral dovetail is used for mounting optical day or night sights. Auxiliary folding steel peep sights can be provided for emergency use although the TRG is normally delivered without sights which are then selected by the customer.

Cartridges are fed from a detachable, two-row staggered centre-fed magazine. The TRG 22 holds 10 rounds, the TRG 42 five; the 0.300 Winchester Magnum TRG 42 holds seven rounds.

The base of the stock is of aluminium profile to which the polyurethane forestock is attached. The butt-stock is also made of polyurethane and is reinforced through the use of an aluminium skeleton. Spacers allow the cheekpiece to be fully adjustable in height and infinitely adjustable in windage and pitch. The butt-plate is adjustable both for distance and angle through the use of spacers and is also infinitely adjustable in height and pitch. The fully adjustable and versatile stock design allows the rifle to be used as a sniper rifle, a UIT standard rifle, or for CISM military rapid fire. In addition, the stock is designed for both right- and left-handed users. Stocks may be olive green or black, the olive green version adding 200 g to the overall weight.

The double-stage trigger pull is adjustable from 1 to 2.5 kg. It is also adjustable in length and horizontal or vertical pitch. The entire trigger assembly including the trigger guard can be removed from the rifle without disassembling any other parts of the rifle.

The safety catch, which is silent in operation, is located inside the trigger guard. The safety locks the trigger mechanism and locks the bolt in the closed position with the firing pin blocked from the primer cap.

Sako TRG sniper rifle

Variant

LEI TRG-SPP suppressed sniper rifle

The TRG rifle is used as the basis for the Law Enforcement International (LEI) TRG-SPP suppressed sniper rifle. See separate entry under United Kingdom for details.

Specifications

Data for TRG 22, where TRG 42 differs, shown in parenthesis

Cartridge: 0.308 Winchester; (0.338 Lapua Magnum or 0.300 Winchester Magnum)
Operation: bolt-action, single-shot
Feed : 10-round box magazine; (5-round)
Weight: empty, without spacers, 4.7 kg; (5.1 kg)
Length: without butt-plate spacers, 1.15 m; (1.2 m)
Barrel: 660 mm; (690 mm)
Rifling: 4 grooves, rh, 1 turn in 279 mm; (1 turn in 305 mm)
Sights: telescope mount and iron emergency sights as required

Manufacturer

Sako Ltd, PO Box 149, FIN-11101 Riihimäki.

Status

Available.

UPDATED

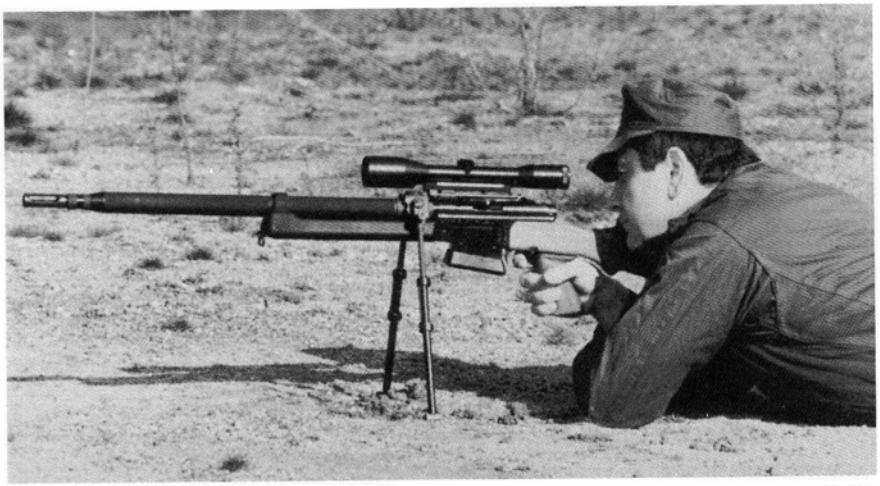
FRANCE

FR-F2 7.62 mm sniper rifle

Description

Introduced in late 1984, the FR-F2 7.62 mm sniper rifle is an improved model of the earlier 7.5 or 7.62 mm FR-F1. The basic characteristics, bolt action and dimensions are the same as the earlier model, the changes being in the nature of functional improvements. The fore-end is metal covered in matt black plastic material; the bipod is more robust and has been moved from its location at the front end of the fore-end to a position just ahead of the receiver. This allows it to be adjusted more easily by the firer, and it is suspended from a yoke around the rear of the barrel where it is less likely to affect the stability of the rifle when firing. The most innovative change is the enclosure of the barrel in a thick plastic thermal sleeve; this, it is claimed, reduces the possibility of heat haze interfering with the line of sight and it is also likely that it will reduce the infrared signature of the weapon.

The FR-F2 is chambered only for the 7.62 × 51 mm NATO cartridge producing a muzzle velocity of 820 m/s.



FR-F2 7.62 mm sniper rifle 0008225

Variants

FR-G1 and FR-G2

The FR-G1 and FR-G2 are further revisions of the FR-F1 and FR-F2 sniper rifles. On the FR-G1 and FR-G2 the forestock is replaced by a wood assembly and the thermal sleeve of the FR-F2 is removed. The main difference between the FR-G1 and FR-G2 is that the FR-G1 has a fixed bipod while that for the FR-G2 is articulated. Various optical sights may be fitted. Without sights the FR-G1 weighs 4.5 kg, with the FR-G2 weighing 4.6 kg.

Specifications

Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Locking: rotating bolt
Feed: 10-round box magazine
Weight: empty, without sights; FR-G1, 4.5 kg: FR-G2, 4.6 kg
Length: without stock spacers, 1.138 m
Barrel: 552 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: optical, × 4; iron fore, flat-topped pyramid with luminous spot; rear, square notch with luminous spots
Muzzle velocity: 820 m/s
Max effective range: 800 m

Manufacturer

Giat Industries, Division Giat Vecteur, 13 route de la Minière, F-78034 Versailles-Satory.

Status

Available.

Service

French Army.

VERIFIED

GERMANY

Blaser R93 tactical precision rifle

Development

The Blaser R93 LRS tactical precision rifle was derived from Blaser's 300 m competition rifle. Several modifications were introduced as the rifle is intended specifically for military and police snipers and others demanding a rifle for long-range precision shooting. The R93 LRS was developed with inputs from military and police snipers, both in Europe and North America.

Description

The Blaser R93 LRS is a unique, straight-pull bolt action, magazine-fed rifle that is the subject of nine separate patents. The receiver is aluminium and is unstressed, all forces being carried by the bolt and barrel.

The Blaser is unique in that, apart from the 0.338 Lapua Magnum version, calibres can be changed in a matter of minutes by replacing the barrel, bolt head and magazine. Barrels can be removed and replaced without altering the rifle's zero as the telescopic sight is fixed to the rifle barrel rather than the receiver. The barrel is held in place by two captive hexagonal-headed nuts that do not require torque settings. The barrel is further positioned by the recoil lug, which joins with a slot on the undersurface of the barrel. The chrome molybdenum barrel is fluted to increase stiffness and cryogenically treated for accuracy. All steel components are protected by a corrosion-resistant gas nitride coating. A muzzle brake reduces felt recoil in 7.62 × 51 mm to approximately that for a 0.243 Winchester rifle. With 0.300 Winchester Magnum the felt recoil is approximately that for a 7.62 × 51 mm rifle.

The locking system consists of a 14 lug collet that expands into a ring in the barrel when the bolt is pressed fully forward. There is no bolt rotation whatsoever. As the rifle is fired, pressure against the bolt face forces the locking lugs more tightly into the locking ring. In the unlikely event of a case head failure there are two safety vents either side of the rifle. The trigger pull is factory-set at 1.2 kg and is user adjustable for position, weight, take-up and over-travel.

Ammunition feed is from a detachable box magazine that positions the cartridges directly in line with the chamber, obviating the need for a feed ramp and ensuring smooth operation. The bolt and carrier ride on two rails that interface with grooves in the receiver. The rifle can be changed from right- to left-handed operation by replacing the bolt and bolt carrier. Headspacing is automatic.

Blaser R93 LRS tactical precision rifle ***NEW***/0132940

The Blaser safety is positioned at the rear of the bolt and has two positions, Safe and Fire. The latter is visibly indicated by a large red dot that is obscured when the rifle is set on Safe. A third intermediate position for safe loading and unloading is possible by partially depressing the safety button in the Safe position. This allows the bolt to be drawn to the rear with the striker and trigger locked.

The one-piece stock is made using moulded synthetic materials. The butt is adjustable for length of pull by inserting spacers and pivots 15° left or right. The cheekpiece is also vertically adjustable. An adjustable monopod is built into the rear of the butt-stock and there is a bipod mounting groove under the fore-stock.

There are no iron sights, the proprietary telescopic sight mount attaches to notches in the barrel. An anti-mirage strap is standard.

Specifications

Cartridge: 0.338 Lapua Magnum: by changing the barrel, bolt and magazine the rifle can accommodate 5.56 × 45 mm; 6 mm Norma BR; 6.5 × 55 mm; 7.62 × 51 mm; 0.300 Winchester Magnum
Operation: manual, straight pull bolt
Locking: see text
Feed: detachable box magazine
Weight: without sight, 4.8 kg
Length: 5.56 × 45 mm and 7.62 × 51 mm, 1.13 m; 0.300 Winchester Magnum, 1.15 m; 0.338 Lapua Magnum, 1.19 m
Barrel: 5.56 × 45 mm and 7.62 × 51 mm, 627 mm; 0.300 Winchester Magnum, 650 mm; 0.338 Lapua Magnum, 685 mm
Rifling: 5.56 × 45 mm, 4 grooves, rh, 1 turn in 228 mm; 7.62 × 51 m and 0.300 Winchester Magnum, 4 grooves, rh, 1 turn in 279 mm; 0.338 Lapua Magnum, 4 grooves, rh, 1 turn in 254 mm
Sight: optical, to customer specifications

Manufacturer

Blaser Jagdwaffen GmbH, Ziegelstadel 1, D-88316 Isny im Allgau.

Status

In production.

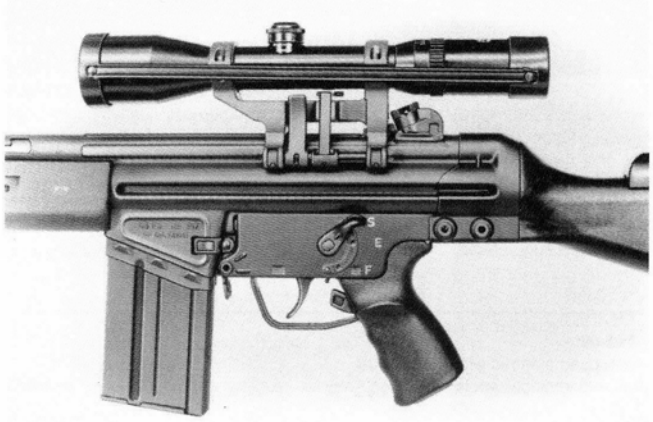
NEW AND UPDATED 12/06/2002

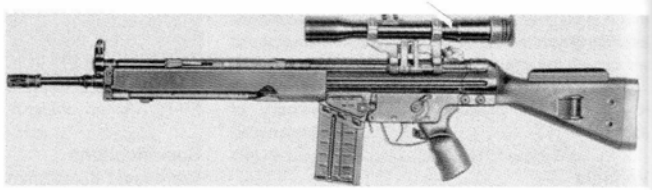
Heckler and Koch 7.62 mm G3 SG/1 sniper rifle

Description

The Heckler and Koch 7.62 mm G3 SG/1 sniper rifle is used by the German police. It is basically the G3A3 but has some differences. During proof and testing of the standard rifles, those that demonstrate their ability to produce minimum groups are set aside for modification to sniper rifles. The sniper rifle is fitted with a special trigger unit. This incorporates a set trigger which has a pull-off that can be varied. Setting the trigger can be done only when the selector lever is set to 'E'. After firing one round the trigger can be reset or the rifle can be fired again using the ordinary trigger setting which has been reduced to 2.6 kg. If the trigger has been set, it is automatically released as soon as the selector lever is changed from 'single shot' to 'safe' or 'automatic'.

The sight is not that normally used by the G3 but is a special Zeiss or Schmidt & Bender telescope with variable power from × 1.5 to × 6 and with windage and range adjustment from 100 to 600 m. The mount employed fits over the receiver and allows use of the iron sights without dismounting the telescope. The graticule pattern is based on the use of the mil, for example, the angle subtended by one unit of length at a distance of 1,000 units, or 1 m at 1,000 m subtends one mil. This system enables the firer to set the correct range provided he can align the telescope on an object of known size. For example a car of approximately 5 m length subtends 25 mils on the telescope. The range therefore is $\frac{5}{25} \times 1{,}000 = 200$ m.





Heckler and Koch 7.62 mm G3 SG/1 police sniper rifle

Sights and trigger of G3 SG/1 police sniper rifle

Specifications
Cartridge: 7.62 × 51 mm
Weight: unloaded, with sight, 5.54 kg
Trigger pull: normal, 2.6 kg; with set trigger, 0.9-1.5 kg
Sight: × 1.5 to × 6 zoom telescope optical; 6 positions, 100-600 m settings

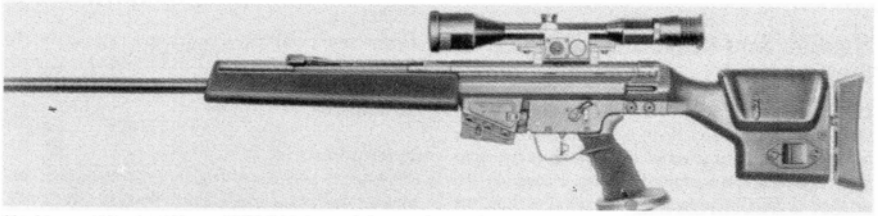
Manufacturer
Heckler and Koch GmbH, D-78722 Oberndorf-Neckar.

Status
Production suspended.

Service
German police and special forces, Malaysia, Italian Carabinieri and other police forces.

VERIFIED

Heckler and Koch 7.62 mm PSG 1 high-precision marksman's rifle



Heckler and Koch 7.62 mm PSG 1 high-precision marksman's rifle

Description
The Präzisionsschützengewehr (high-precision marksman's rifle) PSG 1 is manufactured by Heckler and Koch for police and service use. It is a semi-automatic, single-shot weapon (with 5- or 20-round magazine option) incorporating the company's roller-locked bolt system. Superb accuracy is claimed: an average dispersion diameter of <80 mm is quoted at a range of 300 m for test grouping (5 × 10 shots with Lapua 0.308 Winchester Match ammunition). A 6 × 42 telescopic sight with an infinitely variable illuminated reticule is an integral part of the weapon. Windage and elevation adjustment is by moving lens, with six settings from 100 to 600 m.

The heavy polygon bore barrel is 650 mm long. The manufacturer states that a special system provides for silent and positive bolt closing. A vertically adjustable trigger shoe enlarges the trigger width. The trigger pull is approximately 1.5 kg. Length of shoulder stock, vertical adjustment of cheekpiece and angular adjustment of butt to shoulder are all variable, according to the firer's requirements. If required, a sling may be fitted on the handguard. A precision tripod weighing 1.03 kg is available.

The PSG 1 is normally supplied complete with a transport case carrying the rifle and accessories. These can include two 20-round magazines, two 5-round magazines, a cleaning rod and a bipod. Further accessories include a magazine filling and emptying device and a carrying sling. The case itself weighs 10.4 kg.

Variants
MSG 90 and MSG 90-DMR
See following entries.

Specifications
Cartridge: 7.62 × 51 mm
Operation: delayed blowback, single shot
Method of delay: rollers
Feed: option for 5- or 20-round box magazine
Weight: empty, 8.1 kg
Length: 1.208 m
Barrel: 650 mm
Rifling: polygonal, 4 grooves, rh
Sight: 6 × 42 telescope optical; 6 positions, 100-600 m settings

Manufacturers
Heckler and Koch GmbH, D-78722 Oberndorf-Neckar.

Status
In production.

Service
German and numerous other police and special forces worldwide.

VERIFIED

Heckler and Koch 7.62 mm MSG 90 sniper rifle

Heckler and Koch 7.62 mm MSG 90 sniper rifle showing latest form of bipod and Hensoldt × 10 telescope sight

Description
The Heckler and Koch 7.62 mm MSG 90 sniper rifle, introduced in 1987, uses the same roller-locked delayed blowback system which is common to all Heckler and Koch rifles. At one stage during its development this rifle was known as the PSG3.

Designed to military specifications, specifically those of the US Army's M24 Sniper Rifle System, the MSG 90 uses a special cold-forged and tempered barrel and has a pre-adjusted trigger with a shoe which enlarges the trigger width for better control. The trigger pull is approximately 1.5 kg. The stock is adjustable for length and has a vertically adjustable cheek rest. There are no iron sights, the standard sight being a × 10 telescope with range settings from 100 to 1,200 m. The receiver is fitted with a STANAG mount which will accept any NATO standard night vision or other optical sight.

The fore-end is fitted with an internal T-rail which allows the attachment of a shooting sling or a bipod.

Variant
MSG 90-DMR/MSG 90A1
See following entry.

Specifications
Cartridge: 7.62 × 51 mm
Operation: delayed blowback, semi-automatic only
Method of delay: rollers
Feed: 5- or 20-round box magazine
Weight: empty, 6.4 kg
Length: 1.165 m
Barrel: 600 mm
Rifling: polygonal, rh, 1 turn in 341 mm
Sights: 10 × 42 optical telescope only, 10 positions, 100 to 1,000 m

Manufacturers
Heckler and Koch GmbH, D-78722 Oberndorf-Neckar.

Status
Available.

VERIFIED

Heckler and Koch 7.62 mm MSG 90A1 sniper rifle

Description
The Heckler and Koch 7.62 mm MSG 90A1 sniper rifle is a special variant of the MSG 90 rifle (see separate entry) developed to meet additional user requirements of various user units within the US Department of Defense. Originally known as the MSG 90-DMR (Designated Marksman Rifle), the MSG 90A1 is operationally identical to the standard production MSG 90 but with a number of additional features.

These include the addition of iron sights, adjustable for windage and elevation to a range of 1,200 m, a threaded muzzle for the addition of an optional sound suppressor or the low-signature gas-venting flash hider that is standard on the 90A1 model and a brass deflector incorporated into the receiver just to the rear of the ejection port. Apart from these modifications the MSG 90A1 uses the same magazines, accessories and replacement parts as the standard production MSG 90.

Optional features and accessories unique to the MSG 90A1 include a blank firing attachment, plastic muzzle cap, sight adjustment tool for the iron sights, self-luminous Beta front night sight with a green tritium dot and a multipurpose combat carrying sling.

Heckler and Koch 7.62 mm MSG 90A1 sniper rifle
0008226

Specifications
Cartridge: 7.62 × 51 mm NATO
Operation: delayed blowback, semi-automatic only
Method of delay: rollers
Feed: 5- or 20-round box magazine
Weight: empty, 6.67 kg
Length: 1.165 m
Barrel: 600 mm
Rifling: polygonal, rh, 1 turn in 341 mm
Sights: 10 × 42 optical telescope; front, fixed front post inside circular holder; rear, aperture adjustable for windage and elevation settings from 100 to 1,200 m
Max effective range: 1,000 m with optical sight

Manufacturer
Heckler and Koch GmbH, D-78722 Oberndorf-Neckar.

Status
Available.

VERIFIED

Heckler and Koch 5.56 mm SL8 -2 tactical rifle

Development
When the Heckler and Koch 5.56 mm SL8 was first marketed it was promoted as a general purpose, semi-automatic rifle for commercial sales. Based on the receiver of the G36 assault rifle (as with the SL8), the SL8 has been further developed to the SL8-2 level, with a considerable element of innovation added to suit the weapon as a specialist sniper or sniper back-up rifle. To this end, trials are being conducted with titanium barrels for the SL8-2. Standard barrels are hard chrome-plated.

Description
The Heckler and Koch 5.56 mm SL8-2 tactical rifle follows closely the base outline of the G36 assault rifle, the receiver and general system of operation being virtually identical. Firing is single-shot, semi-automatic only. To suit the rifle to the sniper role, a revised butt-stock has been added, with a pistol grip/thumb hole, cheek rest and an adjustable length butt-pad. An adjustable bipod is added under the foreguard and an elongated sight rail has been located over the receiver. The latter is intended to accommodate a x3 to x12 telescopic sight – there are no iron sights. A translucent 30-round box magazine is provided as standard, as is a sling.

Heckler and Koch 5.56 mm SL8-2 tactical rifle 0087877

Specifications
Cartridge: 5.56 x 45 mm
Operation: gas, semi-automatic
Locking: rotating bolt with 6 lugs
Feed: 30-round box magazine
Weight: with optical sight and bipod, ca 4.9 kg; empty magazine 140 g
Length: 970 mm to 1.02 m
Barrel: 480 mm
Rifling: 6 grooves, rh, 1 turn in 178 mm
Sights: optical, x3 to x12
Muzzle velocity: ca 920 m/s
Trigger pull: approx 18 N

Manufacturers
Heckler and Koch GmbH, D-78722 Oberndorf-Neckar.

Status
Available.

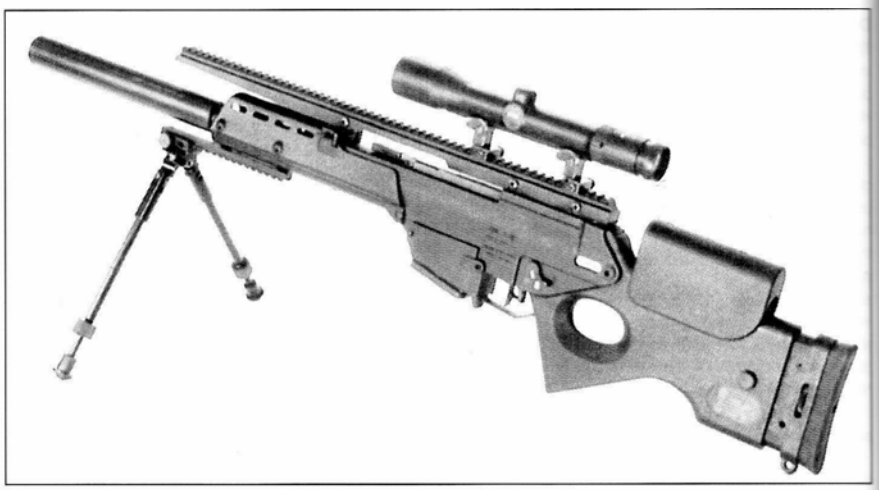
UPDATED

Heckler and Koch 7.62 x 37 mm SL9 SD suppressed rifle

Development
The Heckler and Koch 7.62 × 37 mm SL9 SD suppressed rifle is a development of the commercial SL8 suitably modified by the installation of a fully suppressed barrel to fire the subsonic 7.62 × 37 mm round. The SL9 SD retains the basic receiver of the G36 assault rifle and operates in the same manner, although fire is limited to single shot, semi-automatic.

The 7.62 × 37 mm cartridge, developed by Heckler and Koch, utilises a shortened 5.56 mm case with a fully jacketed Lapua B416 pointed bullet; the bullet is 7.83 mm in diameter and weighs 13 g. Each cartridge weighs 19.8 g. The effective range is 150 mm where dispersion covers a circle with a maximum diameter of 100 mm. At 100 m, the bullet will penetrate three Class 1 bulletproof garments. An alternative round for this rifle is the 0.300 Whisper.

Description
The Heckler and Koch 7.62 × 37 mm SL9 SD suppressed rifle fires semi-automatic only and uses the same mechanism as the G36 assault rifle series. Most of the barrel is shrouded by a suppressor sleeve. The SL9 SD uses a butt stock with adjustable features similar to those of the SL8-2 (see previous entry) but the optical sight is mounted on a length of MIL-STD-1913 Picatinny rail. A further length of MIL-STD-1913 rail is used to secure an adjustable bipod under the front handguard. The standard magazine holds ten rounds. Sound attenuation is given as 100 dBA.



Heckler and Koch 7.62 x 37 mm SL9 SD suppressed rifle 0087878

Specifications
Cartridge: 7.62 × 37 mm or 0.300 Whisper
Operation: gas, semi-automatic
Locking: rotating bolt with 6 lugs
Feed: 10-round box magazine
Weight: with silencer, 5.8 kg
Length: ca 1.15 m
Sights: optical
Muzzle velocity: ca 310 m/s
Muzzle energy: ca 625 J

Manufacturers
Heckler and Koch GmbH, D-78722 Oberndorf-Neckar.

Status
Available.

UPDATED

GREECE

AWT 7.62 mm M70M sniper rifle

Description
The Advanced Weapon Technologies (AWT) 7.62 mm M70M sniper rifle is based on the proven Mauser 98 bolt action, incorporating controlled feeding using a claw type extractor that runs almost the full length of the bolt. The extractor engages the extracting groove of the cartridge the instant the bolt begins to move it forward from the magazine, thereby preventing double feeding and ensuring smooth and positive chambering.

The barrel is cold hammer-forged chrome molybdenum steel. Accuracy is guaranteed to be 1 minute of angle (MOA) using match ammunition.

Feeding is from a ten-round detachable box magazine. An adjustable folding bipod is standard, as

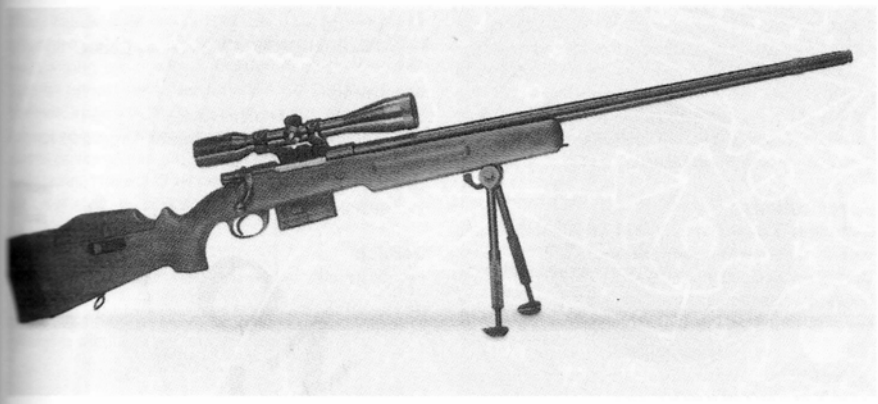
is an adjustable cheekpiece. A 6 × 42 telescopic sight is standard.

Specifications
Cartridge: 7.62 × 51 mm NATO
Operation: manual, bolt action
Locking: rotating bolt; two forward lugs and one rear safety lug
Feed: detachable 10-round box magazine
Weight: 6.5 kg
Length: 1,27 m
Barrel: 698.5 mm
Sights: telescopic, 6 × 42
Max effective range: 800 m

Manufacturer
Advanced Weapons Technologies (AWT), 2A Andrea Papandreou Street, GR-151 27 Melissia, Athens.

Status
Available.

UPDATED



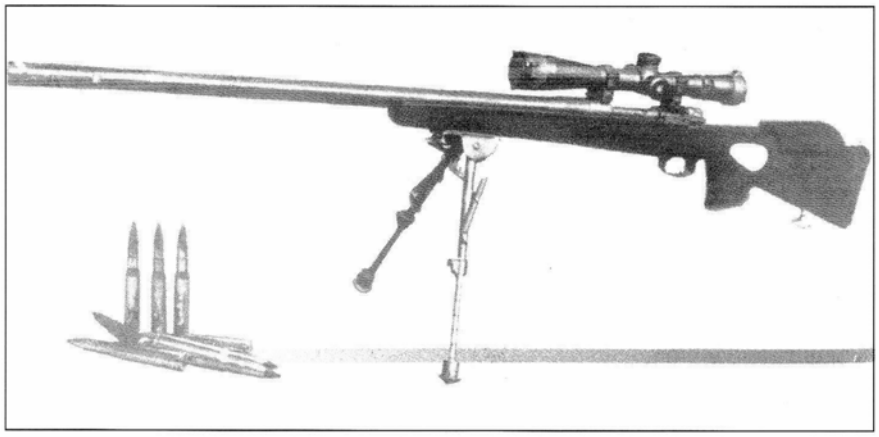
Advanced Weapons Technologies (AWT) 7.62 mm M70M sniper rifle
0054748

INDONESIA

Pindad SPR-1 7.62 mm sniper rifle

Description
The Pindad SPR-1 7.62 mm sniper rifle appears to be a militarised version of a standard bolt-action sporting rifle. The main changes for the sniper role appear to have been the provision of an adjustable height bipod, an adjustable cheek piece for the thumbhole stock and the provision of an optical sight – there is no provision for iron sights. To reduce muzzle jump on firing an angled slot is cut into the barrel above the muzzle. The SPR-1 fires match level 7.62 × 51 mm match standard ammunition. There does not appear to be any provision for a magazine so each round is no doubt loaded by hand.

Specifications
Cartridge: 7.62 × 51 mm
Operation: bolt action, single shot
Locking: rotating bolt
Feed: single shot
Weight: 6.82 kg
Barrel: 650 mm
Rifling: 4 grooves, rh, 1 turn in 304.8 mm
Sights: optical
Muzzle velocity: ca 860 m/s



Pindad SPR-1 7.62 mm sniper rifle ***NEW***/0132069

Manufacturer
PT Pindad, Jl Jenderal Gatot Subroto No 517, Bandung 40284.

Service
Indonesian armed forces.

NEW AND UPDATED 31/05/2002

Status
In production.

INTERNATIONAL

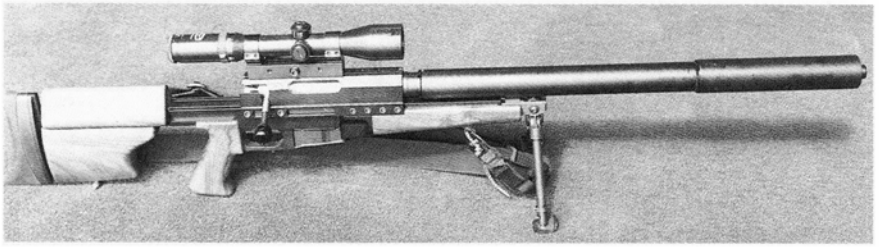
PGM UR Intervention 7.62 mm sniper rifle

Development
PGM Precision of France has joined with FN HERSTAL of France to market the PGM series of specialist rifles. The PGM UR Intervention is now marketed by FN HERSTAL and by FNH USA in the United States.

Description
The PGM UR Intervention 7.62 mm sniper rifle is the base model of a series of specialised sniper rifles grouped under the name of Ultima Ratio®, or UR. All rifles within this series are manually operated bolt-action rifles with all components mounted separately on a central rigid aircraft grade aluminium alloy frame.

The special steel bolt has three front locking lugs and has overpressure vent holes. An instant release 10-round clip magazine is carried inside the receiver (which is also manufactured using aluminium alloy), together with an ambidextrous pistol grip and fully adjustable shoulder stock with an adjustable black rubber shoulder pad. The two-stage trigger mechanism is stated to be 'of military design but of match quality'. A rear safety is provided on the left of the receiver

PGM UR Intervention 7.62 mm sniper rifle (T J Gander)



PGM UR Intervention 7.62 mm sniper rifle fitted with suppressed barrel (T J Gander)

Located at the front end of the forestock is a folding adjustable bipod provided with an axial locking system to prevent accidental tilt and for operations on any type of terrain.

The fully floating barrel is finned for cooling and is manufactured to match-grade standards. An integral muzzle brake is provided. One feature of the PGM UR series is that, using a quick change system, the barrel can be rapidly exchanged for any other barrel with a similar calibre in the UR series, with a guaranteed return to zero. Standard barrel lengths for the UR Intervention are 470 and 600 mm long.

Using the barrel rapid change system, it is also possible to exchange a standard PGM UR barrel for a high-performance modular suppressed barrel which permits the use of subsonic or supersonic ammunition.

The top of the receiver is provided with a rail which can accommodate Universal, Weaver or STANAG scope bases without any need for further fitting.

A sling and sling swivels may be attached using swivel bases.

The PGM UR Intervention base model is produced chambered for 7.62 × 51 mm (0.308 Winchester) or 0.300 Winchester Short Magnum (WSM), although other calibres can be produced on request.

Also produced are PGM UR models intended for civilian sales. One model is the UR Europa, which can be chambered for several calibres, and another the UR Magnum which is chambered for 0.300 Winchester Magnum, although once again, other Magnum calibres can be provided. Under development is a close variant known as the Mini Hecate, a scaled down 12.7 mm Hecate (see entry under Anti-matérial rifles) chambered for either 7.62 × 51 mm NATO (0.308 Winchester) or 0.300 Winchester Short Magnum.

Specifications

Cartridge: 7.62 × 51 mm (0.308 Winchester); 0.300 Winchester Short Magnum; also see text
Operation: bolt action, single shot
Locking: rotating bolt, 3 front locking lugs
Feed: 10-round detachable box magazine
Weight: ca 5.5 kg, according to configuration
Length: with 470 mm barrel, 1.03 m; disassembled, 750 mm
Barrel: 470 or 600 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: optical, to choice

Manufacturer

PGM Precision, BP 29, F-74334 Poisy Cedex.

Marketing

FN HERSTAL SA, B-4040 Herstal.
FNH USA Inc, PO Box 697, McLean, Virginia 22101.

Status

In production.

Service

French government security agencies.

UPDATED

PGM UR Commando 7.62 mm sniper rifles

Development

Originally manufactured by PGM Precision of France, the PGM UR Commando series of sniper rifles are now marketed by FN HERSTAL of Belgium and by FNH USA Inc in the United States.

Description

The PGM UR Commando 7.62 mm sniper rifles are based on the PGM Ultima Ratio® (UR) Intervention model (see previous entry) but are shorter and lighter in construction to suit the requirements of special forces. All the construction features of the UR Intervention model are carried over, although on the Commando models the barrels are deeply fluted rather than finned.

There are two UR Commando models. The UR Commando I has a fixed shoulder stock and may be fitted with barrels 470 or 550 mm long. On the Commando II the shoulder stock assembly can be folded to the left of the receiver to reduce the overall length for transport and stowage. The Commando II barrel length is normally limited to 470 mm. It is also possible for both models to be fitted with the PGM suppressed barrel.

A sling and sling swivels may be attached using swivel bases.

The PGM UR Commando models are produced chambered for 7.62 × 51 mm (0.308 Winchester) although other calibres, such as 0.300 Winchester Short Magnum (WSM), can be produced on request.

PGM UR Commando I 7.62 mm sniper rifle with 550 mm barrel ***NEW***/0103854

Specifications

Cartridge: 7.62 × 51 mm (0.308 Winchester); 0.300 Winchester Magnum; also see text
Operation: bolt action, single shot
Locking: rotating bolt, 3 front locking lugs
Feed: 10-round box magazine
Weight: ca 5.5 kg, according to configuration
Length: with 470 mm barrel, stock folded, 740 mm; stock extended, 1.02 m
Barrel: 470 or 550 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: optical, to choice

Manufacturer

PGM Precision, BP29, F-74334 Poisy Cedex.

Marketing

FN HERSTAL, B-4040 Herstal, Belgium.
FNH USA Inc, PO Box 697, McLean, Virginia 22101.

Status

In production.

Service

French government security agencies.

UPDATED

PGM 0.338 Lapua Magnum sniper rifle

Development

The PGM 0.338 Lapua Magnum sniper rifle is stated to be under development although it has been demonstrated to potential customers. PGM Precision of France has joined with FN HERSTAL of France to market the PGM series of specialist rifles, this rifle will be marketed by FN HERSTAL and by FNH USA in the United States.

Description

The PGM 0.338 Lapua Magnum sniper rifle is a logical development of the other rifles in the PGM family and is basically similar apart from calibre-related components. In its standard form it is therefore a modular, bolt action rifle with a side folding butt-stock, a 10-round box magazine, a folding bipod and a fluted barrel with an integral muzzle brake. Various barrel lengths will be available apart from the standard 690 mm. The choice of optical sight is up to the user.

PGM 0.338 Lapua Magnum sniper rifle (T J Gander) ***NEW***/0132876

Specifications

Cartridge: 0.338 Lapua Magnum
Operation: bolt action, single shot
Locking: rotating bolt, 3 front-locking lugs
Feed: 10-round detachable box magazine
Weight: ca 6.985 kg, according to configuration
Length: 1.38 m
Barrel: 690 mm
Rifling: 6 grooves, rh, 1 turn in 254 mm
Sights: optical, to choice
Muzzle velocity: ca 853 m/s

Manufacturer

PGM Precision, BP 29, F-74334 Poisy Cedex.

Marketing

FN HERSTAL SA, B-4040 Herstal.
FNH USA Inc, PO Box 697, McLean, Virginia 22101.

Status

Final development.

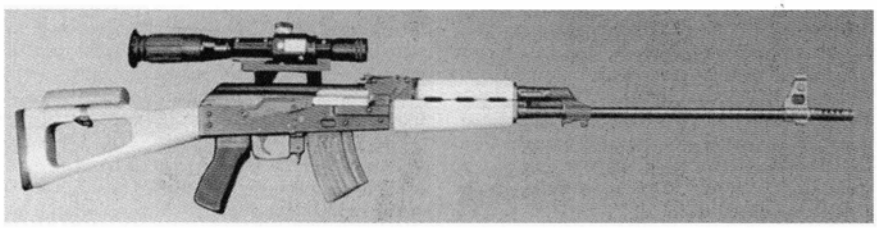
NEW ENTRY

IRAQ

Tabuk 7.62 mm sniper rifle

Description
The Tabuk 7.62 mm sniper rifle is based on the standard 7.62 × 39 mm Kalashnikov action but fitted with a long barrel with a muzzle brake, skeleton butt and an optical sight. The general effect is similar to the former Yugoslav M76 rifle, but firing the standard intermediate rimless cartridge rather than one of the more powerful cartridges more usually found in sniper weapons. The effective range is claimed to be 800 m but is likely to be less in practice.

Specifications
Cartridge: 7.62 × 39 mm
Operation: gas, semi-automatic
Locking: rotating bolt
Weight: with sight and empty magazine, 4.5 kg



Tabuk 7.62 × 39 mm sniper rifle

Length: 1.11 m
Barrel: 600 mm
Muzzle velocity: 740 m/s
Max effective range: 800 m

Manufacturer
State arsenals.

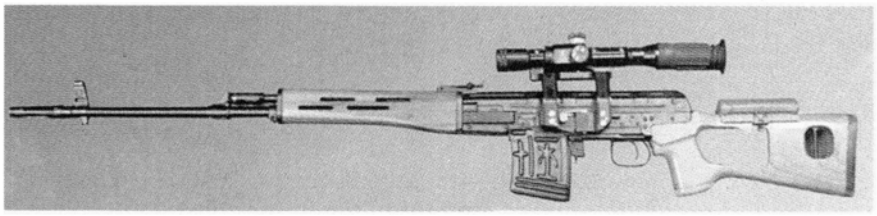
Status
Current status uncertain.

VERIFIED

Al-Kadisa 7.62 mm sniper rifle

Description
The Al-Kadisa 7.62 mm sniper rifle is the standard RFAS Dragunov 7.62 mm SVD manufactured in Iraq. The only points of difference are in the fore-end, pierced with four long slots on each side instead of six short and the magazine, which has an ornamental relief pattern showing a stylised palm tree. There are some very small dimensional differences, though it is difficult to see precisely how these arise. It is probable that the butt may be a fraction longer in this version.

Specifications
Cartridge: 7.62 × 54R
Operation: gas, semi-automatic
Locking: rotating bolt
Feed: 10-round box magazine



Al-Kadisa 7.62 mm sniper rifle

Weight: with telescope and empty magazine, 4.3 kg
Length: 1.23 m
Barrel: 620 mm
Muzzle velocity: 830 m/s

Manufacturer
State arsenals.

Status
In production.

VERIFIED

ISRAEL

IMI SR-99 7.62 mm semi-automatic sniper rifle

Development
The IMI SR-99 7.62 mm semi-automatic sniper rifle was first shown outside Israel in June 2000 and is a product of IMI's Integrated Security Systems Group (ISSG). The SR-99 is a further development of the basic Galil assault rifle and is stated to be an all-round improvement over the previous model of Galil sniper rifle (see following entry). It is understood to be in service with the Israeli armed forces.

Description
The IMI SR-99 7.62 mm semi-automatic sniper rifle retains the receiver of the Galil assault rifle with a one-piece bolt carrier and cocking handle for silent operation. All other components are custom-built for the sniper role. The receiver is allied with a heavy cold hammer-forged barrel provided with a combined muzzle brake and jump compensator. A flexible mirage deflector is mounted above the barrel. Ammunition is fed from a 10- or 25-round detachable magazine.

The furniture is ergonomically shaped using polycarbonate mouldings, with numerous adjustments to suit individual users. On the side-folding butt, the butt-plate and cheek piece are both adjustable and there is an adjustable support leg. An adjustable hand rest is provided on the pistol grip while, at the forward end, there is an adjustable folding bipod with traverse freedom. A rail under the fore-end has provision for mounting a Harris bipod.

Optical sights are mounted on a left-side-located, quickly detachable mounting which is stated to ensure zero retention even after repeated dismounting. A typical optical sight is the Nimrod 6 × 40. Various other optical or night sights can be utilised and back-up iron sights are provided.

Specifications
Cartridge: 7.62 × 51 mm NATO
Operation: gas, semi-automatic
Locking: rotating bolt
Feed: 10- or 25-round box magazine
Weight: unloaded, 5.1 kg; load magazine, 900 g; optical sight (typical) 900 g
Length: stock folded, 845 mm; stock extended, 1.112 m
Barrel: 508 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: optical, to user choice, iron back-up sights

IMI SR-99 7.62 mm semi-automatic sniper rifle
0093151

Manufacturer
Israel Military Industries Limited (IMI), Integrated Security Systems Group, 64 Bialik Boulevard, PO Box 1044, IL-47100 Ramat Hasharon.

Status
Available.

Service
Israel Defence Forces.

UPDATED

IMI 7.62 mm Galil sniper rifle

Description

Developed in close co-operation with the Israeli Defence Forces, the Galil sniper rifle is a semi-automatic gas-operated rifle specially designed to meet the particular demands of sniping. It is chambered for the 7.62 × 51 mm NATO cartridge but will perform best with selected lots or with match-quality ammunition. The accuracy requirement is considered to be a 120 to 150 mm circle at 300 m range and a 300 mm circle at 600 m range. The Galil sniper consistently exceeds these requirements.

The mechanism and general configuration is that of the standard Galil rifle, but there are a number of features peculiar to this model. A bipod is mounted behind the fore-end and attached to the receiver, so it can be adjusted by the firer and also relieve the barrel of supportive stress. The barrel is heavier than standard, which contributes to the accuracy. The telescope sight mount is on the side of the receiver and is a precision cast, long-base unit giving particularly good support to the Nimrod 6 × 40 telescopic sight supplied as standard. The sight mount and telescope can be mounted and dismounted quickly and easily without disturbing the rifle's zero and any type of night sight can be fitted.

The barrel is fitted with a muzzle brake and compensator which reduces jump and permits rapid realignment of the rifle after firing. A silencer can be substituted for the muzzle brake if desired; when in use, it is recommended that subsonic ammunition be used.

There is a two-stage trigger. The safety catch is above the pistol grip and there is no provision for automatic fire in this weapon. The wooden stock can be folded, to reduce the overall length of the rifle for carriage and, when unfolded and locked, is perfectly rigid. The butt-stock is fitted with a cheekpiece and a rubber recoil pad, both of which are fully adjustable.

Each rifle is supplied in a specially designed case, which also contains the sight, two optical filters for use with the sight, a carrying and firing sling, two magazines and the cleaning kit.

IMI 7.62 mm Galil sniper rifle

Specifications

Cartridge: 7.62 × 51 mm NATO
Operation: gas-operated, semi-automatic only
Locking: rotating bolt
Feed: 20-round box magazine
Weight: empty, including bipod and sling, 6.4 kg; combat weight, 7.9 kg
Length: butt folded, 840 mm; butt extended, 1.11 m
Barrel: without muzzle brake, 508 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: iron sights, fore, blade; rear, aperture; optical, Nimrod 6 × 40 telescope
Sight radius: 475 mm
Muzzle velocity: FN match ammunition, 10.9 g bullet, 815 m/s; M118 match ammunition, 11.2 g bullet, 780 m/s

Manufacturer

Israel Military Industries Ltd (IMI), 64 Bialik Boulevard, PO Box 1044, IL-47100 Ramat Hasharon.

Status

Available.

Service

Israeli Defence Force.

UPDATED

ITALY

Beretta 7.62 mm sniper rifle

Description

The Beretta 7.62 mm sniper rifle is a conventional bolt-action repeating rifle chambered for the 7.62 × 51 mm NATO cartridge. It has a heavy free-floating barrel, with a flash eliminator on the muzzle and a tube in the fore-end acts as a locating point for a bipod. It is possible that it also contains a harmonic balancer to reduce barrel vibration.

The rifle is fitted with target-quality iron sights, the foresight being hooded to obviate reflection and glare and the rearsight being fully adjustable for elevation and windage. However, as a sniper rifle, it will normally be fitted with an optical sight; the sight recommended by the makers being the Zeiss Diavari-Z, a × 1.5 to × 6 zoom telescope. The sight mount is to NATO STANAG 2324, and thus virtually any optical or electro-optical sight can be accommodated.

The thumb-hole pattern stock is of wood and the recoil pad and cheekpiece can be adjusted to suit the firer. Similarly, there is a hand-stop under the fore-end which is adjustable and which also serves to locate the firing sling, should one be required.

Specifications

Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 5-round box magazine
Weight: empty, 5.55 kg; bipod, 950 g; optical sight, 700 g
Length: 1.165 m
Barrel: 586 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: fore, hooded blade; rear, fully adjustable V-notch; optical, Zeiss Diavari-Z × 1.5 - × 6 42T

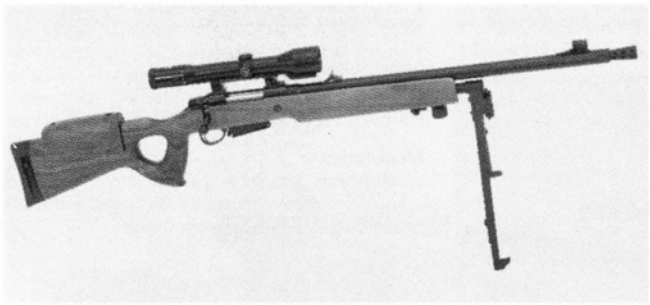
Manufacturer

Armi Beretta SpA, Via Beretta 18, I-25063 Gardone VT (Brescia).

Status

No longer in production.

VERIFIED



Beretta 7.62 mm sniper rifle with bipod

Beretta 7.62 mm sniper rifle

NORWAY

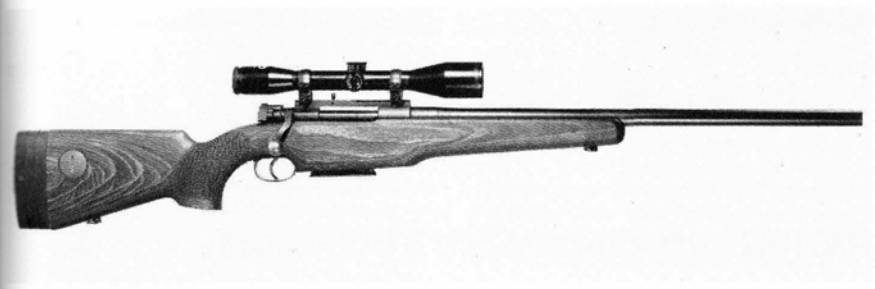
NM149S 7.62 mm sniper rifle

Description

The NM149S 7.62 mm sniper rifle uses a Mauser Model 98 bolt action and was developed in co-operation with the Norwegian Army. Intended for use out to a range of 800 m, it is fitted with a Schmidt & Bender 6 × 42 telescope sight which may be mounted and removed without altering the weapon's zero. Iron sights are also fitted and the telescope sight may be replaced by a Simrad KN250 image intensifying sight.

The stock is of impregnated and laminated beech veneer and may be adjusted for length by the use of butt-plate spacers. The rifle has a match trigger, adjusted to a 1.5 kg pull, and the weapon can be equipped with bipod and sound suppressor.

Specifications
Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 5-round box magazine
Weight: with telescope, 5.6 kg
Length: 1.12 m
Barrel: 600 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: Schmidt & Bender 6 × 42 telescope



Manufacturer
Våpensmia A/S, Box 86, N-2870 Dokka.

Status
Production complete.

Service
Norwegian Army.

UPDATED

NM149S 7.62 mm sniper rifle

VS 94 PS 7.62 mm sniper rifle

Description
The VS 94 PS 7.62 mm sniper rifle uses a modified Mauser Model 98 bolt action and was developed in co-operation with the Norwegian police forces, although it could have other para-military and military roles. Intended for use out to a range of 800 m, it is fitted with a Schmidt & Bender 3-12 × 50 PM II telescope sight which may be mounted and removed without altering the weapon's zero. Adjustable iron sights are also fitted and the telescope sight may be replaced by a Simrad KN250 image intensifying sight.

The stock is of impregnated and laminated beech veneer and may be adjusted for length by the use of butt-plate spacers; it also has an adjustable cheekpiece. The rifle has a match trigger, adjusted to a 1.5 kg pull, and the weapon can be equipped with a fully adjustable bipod and sound suppressor.

Specifications
Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 5-round box magazine
Weight: empty, with telescope, 7 kg
Length: 1.16 m
Barrel: 600 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: Schmidt & Bender 3-12 × 50 PM II telescope; iron sights

VS 94 PS 7.62 mm sniper rifle ***NEW***/0129132

Manufacturer
Våpensmia A/S, Box 86, N-2870 Dokka.

Service
Norwegian police forces.

Status
Available.

UPDATED

ROMANIA

ROMARM PL 7.62 mm sniper rifle

Description
The ROMARM PL 7.62 mm sniper rifle was originally a military adaptation of a commercial design. The PL is a bolt action repeater and is now a dedicated military sniper rifle.

This rifle is a bolt-action repeater firing the 7.62 × 54R cartridge. The overall design is conventional, featuring wooden furniture, a fully adjustable butt-stock with an adjustable cheek rest and butt-pad, a semi-pistol grip and a folding, adjustable-height bipod. Rounds are fed from a slightly curved detachable 10-round box magazine. The barrel features a multibaffle muzzle brake. Iron sights are provided although various forms of optical sight can be fitted. The rifle has been observed mounting a 4 × 6° optical sight.

ROMARM PL 7.62 mm sniper rifle (T J Gander) 0053918

For details of the latest updates to *Jane's Infantry Weapons* online and to discover the additional information available exclusively to online subscribers please visit
jiw.janes.com

Specifications
Cartridge: 7.62 × 54R
Operation: bolt action, repeater
Locking: manually-operated rotary bolt
Feed: 10-round detachable box magazine
Weight: without magazine, 4.5 kg; empty magazine, 210 g
Length: 1.24 m
Barrel: 625 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: fore, pillar; rear, adjustable U-notch; various optical sights
Sight radius: 590 mm
Muzzle velocity: 850 m/s
Max effective range: 800-1,000 m

Agency
SN ROMARM SA, Calea Victoriei (Pasajul Victoriei) nr 48-50, sector 1, cod 70102, Bucharest.

Status
Available.

Service
Romanian armed forces. Offered for export sales.

VERIFIED

RUSSIAN FEDERATION AND ASSOCIATED STATES (CIS)

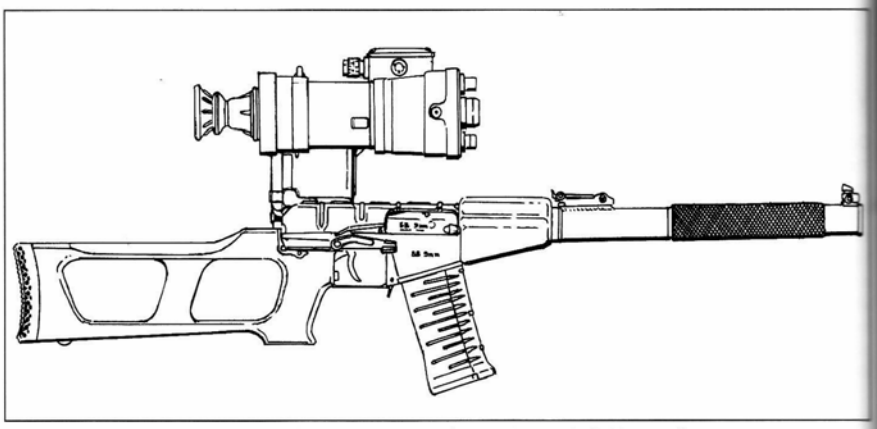
9 mm VSS silent sniper rifle

Development
The development of the 9 mm VSS (6P29) silent sniper rifle was carried out in parallel with that of the AS silent assault rifle (see previous entry) but whereas the AS is intended for use as a silenced rifle for special forces the VSS (also known as the Vintorez, or Thread Cutter) was developed for use as a silenced sniper rifle by Spetsnaz undercover or clandestine units, a role made evident by its ability to be stripped down for carriage in a specially fitted briefcase.

The VSS forms part of the VSK silenced sniper system. With the system, the rifle can be allied to the PKS-07 collimated telescopic sight or the PKN-03 night sight.

The VSS fires the armour-penetrating 9 × 39 mm SP-5 cartridge. Sniper fire is normally single shot only, using a 10-round magazine but it is possible to fit the 20-round AS magazine for fully automatic fire. When the rifle forms part of the VSK system the range of ammunition can be extended to include the SP-5, SP-6 and PAB-9 cartridges.

As with the AS silent assault rifle, the designers regard the combination of rifle and ammunition as a 'complex'. For the VSS the complex is enlarged to include sighting systems.

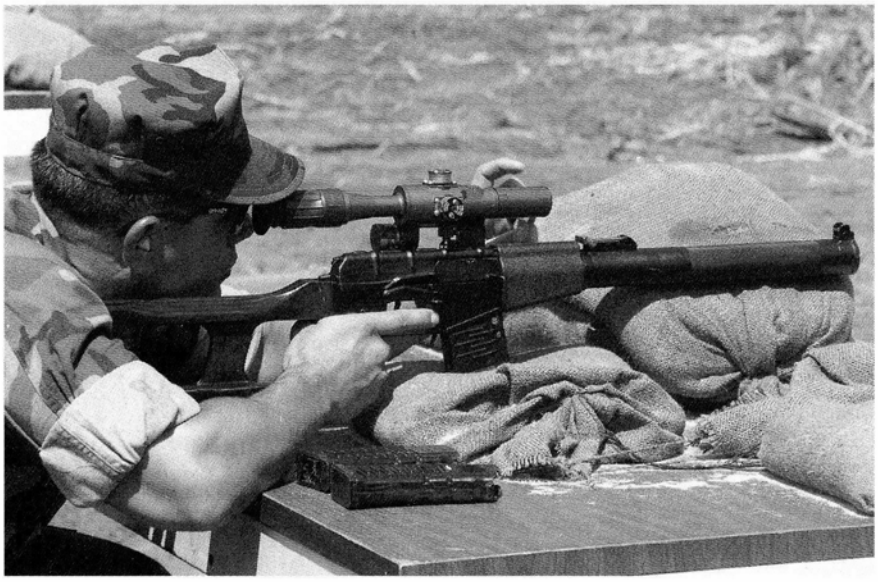


Drawing of 9 mm VSS silent sniper rifle equipped with NSPU-3 night sight (L Haywood)

Description
The overall operating features and sound suppression system used on the 9 mm VSS silent sniper rifle are exactly the same as those for the Val assault rifle (see previous entry). The main change involved with the VSS is that it is optimised to fire the 9 × 39 mm SP-5 subsonic cartridge which is provided with a hardened steel or tungsten tip to penetrate a 6 mm 'high-density steel plate' at 100 m; a 2 mm steel plate or a standard army helmet can be fully penetrated at 500 m. In both cases there will still be sufficient energy available to disable targets after the plates have been penetrated.

The VSS is normally provided with a 10-round magazine and is fired single shot. Should the need arise to employ the weapon's fully automatic fire capability the 20-round magazine from the AS rifle can be utilised.

The butt-stock used on the VSS is a more rounded derivative of that provided on the Dragunov 7.62 mm SVD sniper rifle and can be removed when the rifle is dismantled into three main components for carriage and/or concealment in a special briefcase measuring 450 × 370 × 140 mm. The briefcase contains all components of the VSS along with a PSO-1-1 (1P43) optical sight, an × 3.46 NSPU-3 (1PN75) night sight and two magazines. If the optical and night sights are not required, the usual iron sights remain available.



9 mm VSS silent sniper rifle equipped with PSO-1 optical sight undergoing tests in the USA (C Cutshaw) 0037065

Specifications
Cartridge: 9 × 39 mm SP-5, SP-6, PAB-9
Operation: gas, selective fire
Locking: rotating bolt
Feed: 10- or 20-round box magazine
Weight: with empty magazine and without sights, 2.6 kg; with PSO-1-1 optical sight, 3.4 kg
Length: 894 mm
Barrel: 200 mm
Muzzle velocity: 290 m/s
Rate of fire: cyclic, 800-900 rds/min
Effective rate of fire: semi-automatic, 30 rds/min; automatic, 60 rds/min
Range: day, >400 m; night, >300 m
Optical sight weight: 580 g
Optical sight length: 375 mm
Night sight weight: 2.1 kg
Night sight length: 340 mm
Carrying case dimensions: 450 × 370 × 140 mm

Manufacturer
TZNITOCHMASH, 2 Zavodskaya Street, Klimovsk 142181, Moscow Region, Russia.

Marketing agency
Rosoboronexport Federal State Unitary Enterprise, 21 Gogolevsky Boulevard, 119865 Moscow, Russia.

Status
In production. Offered for export sales.

Service
RFAS Army, special forces and Internal Ministry personnel.

UPDATED

Dragunov 9.3 mm SVDK sniper rifle

Development
Following analysis of combat experience in Afghanistan and elsewhere, it was decided to develop a version of the SVD firing a heavier bullet to provide more accuracy and striking power at longer ranges. The cartridge involved became the 9.o SN (9.3 × 64 mm). The complete 9.o SN cartridge weighs 36 g of which 17.27 g is the steel-cored bullet. The cartridge is 88.8 mm long overall. Bullet velocity at 25 m from the muzzle is from 755 to 770 m/s. API and Tracer rounds are available. At 100 m there is better than an 80 per cent chance of the bullet penetrating a 10 mm armoured plate.

The base SVD rifle required some modification to fire this new cartridge and the end result is the SVDK, already in production by IZHMASH and proceeding towards full series production.

Description
The SVDK is a variant of the SVD developed to equip airborne and mechanised forces with a sniper (or

selected marksman) rifle capable of hitting targets at long ranges with a single shot. In many respects the base SVD and the SVDK are similar, with 60 per cent of the parts and components interchangeable, although the SVDK has the folding butt stock of the SVDS (see separate entry), and a shorter barrel. Other changes include a conical muzzle brake/flash suppressor, a pistol grip under the receiver, black fibreglass-reinforced polyamide furniture as standard, and no provision for fitting a bayonet, although one is available in accessory kit form. A folding bipod with telescopic legs is also provided for the SVDK. To provide extra strength and durability, the SVDK top cover is stamped from steel 1 mm thick, compared to 0.7 mm on the SVD.

The buttstock, which folds to the right of the receiver, is a welded component using tubular steel segments. The buttplate is reinforced polyamide. A three-position cheek rest is provided. One position is for travelling, the second for use with the PSO-1 optical sight, and the third lowered, for when using the iron sights calibrated for ranges up to 1,200 m.

The barrel, connected to the receiver by four pins, is manufactured from a solid blank by cold hammer forging. The gas regulator is similar to that of the SVD while the piston has no obturating grooves and the diameters of the gas piston and tube are enlarged. The monobloc muzzle brake/flash suppressor assembly has four teardrop-shaped slots so arranged that the two over the top are closer together than the two on the bottom. This arrangement reduces muzzle climb on firing while diverting muzzle gas away to the sides rather than stirring up position-revealing dust. Two pins mating with notches on the upper side of the barrel ensure that the attachment is always correctly positioned.

To accommodate the new pistol grip the entire trigger assembly position is moved about 10 mm forward compared to that on the SVD. The black polyamide furniture is provide with horizontal ribs to provide a better gripping surface, while the interiors of the mouldings have additional strengthening ribs.

Specifications

Cartridge: 9.3 × 64 9.o SN
Operation: gas, short-stroke piston, self-loading
Locking: rotating bolt
Feed: 10-round box magazine
Weight: with PSO-1 and empty magazine, 4.8 kg
Length: stock extended, 1.135 m; stock folded, 875 mm
Barrel: 565 mm
Rifling: 6 grooves, rh, 1 turn in 295 mm
Sights: fore, adjustable post with protective hood; rear, U-notch, tangent; PSO-1 optical sight
Muzzle velocity: at 25 m, 755 to 770 m/s
Max effective range: iron sights, 1,200 m; optical sight, 1,500 m; night vision device, 700 m
Max possible lethal range: 4,000 m

Manufacturer

IZHMASH, 3 Derjabin Street, 426006 Izhevsk, Russia.

Status

In production. Proceeding towards full series production.

UPDATED

Dragunov 9.3 mm SVDK sniper rifle (V Shilin) ***NEW***/0116675

Dragunov 7.62 mm sniper rifle (SVD)

Development

The SVD sniper rifle was designed by Evginiy Fedorovich Dragunov, with the first working prototype being produced in 1958. It was not until 1963 that the service version appeared. Since then several sub-variants have appeared, the latest being the SVDS and SVDK (see separate entries). A version with a fully automatic firing mode was developed, together with a model with a bipod just forward of the magazine. Neither was accepted for service.

Description

The Dragunov 7.62 mm sniper rifle, or SVD, is a semi-automatic arm with a 10-round magazine and is chambered for the rimmed 7.62 × 54R cartridge. It is gas-operated with a cylinder above the barrel. There is a two-position gas regulator which may be adjusted using the rim of a cartridge case as a tool. The first position is employed in the usual operation of the rifle and the second is for extended use at a rapid rate or when conditions are adverse.

The bolt system is, in principle, exactly the same as that used in the AK-47, AKM and RPK, but the Dragunov bolt cannot be interchanged with that of the other weapons which fire the 7.62 × 39 mm rimless round. However, the assault rifle and light machine gun are operated on a long-stroke piston principle which is inappropriate for this rifle since the movement of the fairly heavy mass with the consequent change in the centre of balance militates against extreme accuracy. Therefore, in the Dragunov, the designer utilised a short-stroke piston system. The piston, lightweight, is driven back by the impulsive blow delivered by the gas force and transfers energy to the bolt carrier which moves back. A lug on the bolt, running in a cam path on the carrier, rotates the bolt to unlock it. The carrier and the bolt travel back together, the return spring is compressed and the carrier moves forward to lock the bolt before firing can take place. Mechanical safety is produced by the continued movement of the carrier after bolting is completed. When the carrier is fully home a safety sear is released and this frees the hammer which, when the trigger is operated, can travel forward to drive the firing pin into the cap. The rifle has a guaranteed service life of 6,000 rounds.

Since the trigger mechanism has to provide only single-shot fire, it is a simple design using the hammer, the safety sear controlled by the carrier and a disconnector. The disconnector ensures that the trigger must be released after each shot to reconnect the trigger bar with the sear.

The PSO-1 sight is a × 4 telescopic sight with power for graticule illumination supplied by a small battery. It is rather longer than most telescopic sights at 375 mm but a rubber eyepiece is included in this length. The firer's eye is in contact with this rubber which automatically gives the correct eye relief of 68 mm. The true field of view is 6° which is comparable with that obtained in most military telescopes of modern design. The coating used on the lenses to reduce light loss on the interchange surfaces is extremely effective and the depth and uniformity of the deposit compares favourably with any other similar sight in service. Weight of the PSO-1 is 580 g. The latest version of this sight is the PSO-1M2.

The sight incorporates a metascope, meaning it is capable of detecting an infra-red source. It is not sufficiently sensitive to be used as a night vision sight.

When fitted with the PSO-1 optical sight the SVD has the designation 6V1. When fitted with the NSPU-3 (1PN51) night sight the designation changes to 6V1-N3 or SVDN3. The NSPU-3 (1PN51) sight weighs 2.1 kg and allows accurate sighting to be carried out to a range of 1,000 m at night or under poor visibility conditions. Another night sight option is the 1PN93. When fitted with this sight the SVD becomes the SVDN4.

An unusual feature for a sniper rifle is that the muzzle of the SVD can accommodate a bayonet, the 6X4, which also doubles as a field knife.

Variants

Upgraded SVD
The latest upgraded version of the SVD has a synthetic skeleton pattern buttstock, cheek rest, butt-plate and furniture. A detachable bipod with telescopic legs is also available. Also available as an alternative to the usual PSO-1 optical sight is the Minuta 3-9 × 42 optical sight, suitable for targets at ranges up to 1,200 m. With this sight the normal target image is reversed right to left and top to bottom, although a reversing system is available. An orange light filter can be used to increase image contrast and the main sight and range-finder reticules can be illuminated, both simultaneously or independently, as required.

SVDN3
SVD rifle fitted with a NSPU-3 (1PN51) night sight.

SVDN4
SVD rifle fitted with a 1PN93 night sight.

SVDS
See separate entry.

SVDK
See separate entry.

OTs-03AS (SVU)
See separate entry.

TSV-1
Training rifle firing 0.22 ammunition.

Dragunov 7.62 mm sniper rifle (SVD) (T J Gander)

Specifications
SVD
Cartridge: 7.62 × 54R, including 7N14 AP
Operation: gas, short-stroke piston, self-loading
Locking: rotating bolt
Feed: 10-round box magazine
Weight: with PSO-1 and empty magazine, 4.3 kg; with PSO-1 and loaded magazine, 4.51 kg; with NSPU-3, 6.4 kg
Length: 1.225 m; with bayonet-knife, 1.37 m
Height: 175 mm
Width: 88 mm
Barrel: 620 mm
Rifling: 4 grooves, rh, 1 turn in 240 mm
Sights: fore, adjustable post; rear, U-notch, tangent
Sight radius: 587 mm
PSO-1 telescope: 4 × 24, 68 mm eye relief, 6° field of view
Muzzle velocity: 830 m/s
Max effective range: 800 to 1,000 m
Rate of fire: practical, 30 rds/min
Operational temperature range: –50 to +50°C

Manufacturer
IZHMASH, 3 Derjabin Street, 426006 Izhevsk, Russia.

Marketing agency
Rosoboronexport Federal State Unitary Enterprise, 21 Gogolevsky Boulevard, 119865 Moscow, Russia.

Status
In production. Offered for export sales.

Service
Former Warsaw Pact armies and other nations, including Finland, India and other nations.

Similar models
CHINA, PEOPLE'S REPUBLIC
Manufacturer: China North Industries Corporation (NORINCO)
Type: 7.62 mm Type 79
Remarks: Available for export sales. See separate entry under China, People's Republic for details.

IRAN
Manufacturer: State factories
Type: 7.62 mm Al-Kadisa
Remarks: See entry under Iran for details.

ROMANIA
Manufacturer: ROMARM
Type: Sniper Rifle 7.62 mm (PSL)
Remarks: Identical to standard SVD. Offered for export sales.

UPDATED

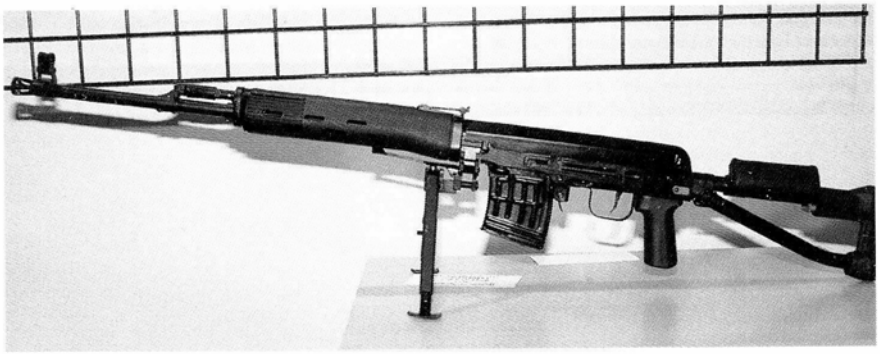
Dragunov 7.62 mm SVDS sniper rifle

Development
Following combat experience in Afghanistan, it was decided to develop a version of the SVD 7.62 mm sniper rifle with a more compact overall envelope to allow it to be more easily carried in helicopters and armoured personnel carriers. The last of a series of development models appeared in 1994. Two sub-variants were proposed at that time, both with folding butt-stocks. One was the SVDS-A, intended for general infantry use and with a barrel 620 mm long. The other, intended for use by airborne forces and having a 565 mm barrel, was known as the SVDS-D. The only model accepted for both infantry and airborne service was the SVDS-D.

It is understood that a version of this rifle is available chambered for the 7.62 × 51 mm NATO cartridge.

Description
The SVDS is a variant of the SVD developed to provide airborne and special forces with a sniper rifle of compact length while remaining capable of delivering aimed fire at long ranges. To achieve this the SVD butt-stock has been replaced by a tubular metal one which folds to the right of the receiver, while the barrel has been shortened and provided with a revised muzzle attachment. No provision is made for a bayonet on the SVDS. A rudimentary cheek rest pad is provided on the folding stock while the pistol grip (no longer part of the butt-stock) and forestock are made using a roughened plastic-based material. An optional 15-round box magazine was introduced for use with the SVDS as has an optional clip-on bipod secured just forward of the magazine – neither appears to have found widespread favour. Other aspects of the SVDS remain as on the longer SVD original. It is not intended that the SVDS should be fired with the stock folded, as the cocking handle and trigger are obstructed.

With the stock extended, the overall length is 1.135 m which reduces to 875 mm once the stock is folded. The PSO-1 or PSO-1M2 × 4 sight is retained, together with back-up iron sights calibrated to 1,200 m. With the rifle empty, but with the sight in place, the weight is actually increased to 4.68 kg. The shorter barrel reduces the muzzle velocity to 810 m/s.



7.62 mm SVDS sniper rifle with butt-stock extended (T J Gander) ***NEW***/0105948

Variants
SVDSN2
A SVDS rifle equipped with a NSPU-M night sight.

SVDSN3
A SVDS rifle equipped with a NSPU-3 (1PN51) night sight.

SVDSN4
A SVDS rifle equipped with a 1PN93 night sight.

Specifications
Cartridge: 7.62 × 54R, including 7N14 AP
Operation: gas, short-stroke piston, self-loading
Locking: rotating bolt
Feed: 10-round box magazine (15-round optional)
Weight: with PSO-1 and empty magazine, 4.68 kg
Length: stock extended, 1.135 m; stock folded, 875 mm
Height: 175 mm
Width: 88 mm
Barrel: 565 mm
Rifling: 4 grooves, rh, 1 turn in 240 mm
Sights: fore, adjustable post; rear, U-notch, tangent; PSO-1 optical sight
Sight radius: 545 mm
Muzzle velocity: 810 m/s
Rate of fire: practical, 30 rds/min
Operational temperature range: –50 to +50°C

Manufacturer
IZHMASH, 3 Derjabin Street, 426006 Izhevsk, Russia.

Marketing agency
Rosoboronexport Federal State Unitary Enterprise, 21 Gogolevsky Boulevard, 119865 Moscow, Russia.

Status
In production. Offered for export sales.

UPDATED

SV-98 7.62 mm sniper rifle

Development
The 7.62 mm SV-98 (Snaiperskaya Vintovka, Model 1998) sniper rifle was derived from the Record-1 competition rifle and is chambered for either 7.62 × 54R or 7.62 × 51 mm NATO cartridges. According to the manufacturer a 0.338 Lapua Magnum version will soon be available.

The adoption of this bolt action sniper rifle signals the recognition by Russian military officials that for many missions a bolt action rifle is highly desirable. The bolt action SV-98 can be equipped with a sound suppressor for missions where silence is required and the sniper can control the dispersion of spent cartridge cases, rather than having them ejected and then having to search for them.

Description
The 7.62 mm SV-98 is essentially a militarised version of the Record-1 competition rifle. The butt-stocks two ventilation slots, although Russian sources have stated that a glass fibre reinforced polymer stock will be available. The butt plate and cheek piece are fully adjustable for length and height. A rearward-folding, adjustable bipod is a standard fixture.

The fully free-floating barrel is cold hammer-forged and is unlined, although a chrome lining can be applied on request. Once the forging process is complete the barrel interior is polished. On full production models a conical birdcage pattern muzzle brake is provided. It appears that this muzzle attachment is threaded onto the muzzle as the same interface can be used for the optional suppressor. Barrel attachment to the receiver involves four pins. The forged receiver is rectangular in

section and is attached to the stock via two bolts. The trigger is adjustable for weight of pull while the safety is located behind the bolt handle and blocks both the firing pin, bolt and trigger when applied.

An anti-mirage strap can be fixed between the front and rear sights. The open sights are similar to those of the SVD rifle but the optical sights and method of attachment are quite different. The × 7 telescopic sight has the designation PKS-07, the increased magnification reflecting the increased range of the SV-98. It is understood that the sight reticule is the same as that for the PSO-1 optical sight. Attachment is via a dovetail platform over the receiver. This is similar to the NATO MIL-STD-1913 rails and is far more stable and accuracy-enhancing than the traditional Russian method of attaching optics.

Specifications
Cartridge: 7.62 × 54R or 7.62 × 51 mm NATO
Operation: manual, bolt action
Locking: rotating bolt, 3 lugs
Feed: 10-round detachable box magazine
Weight: 6.2 kg
Length: 1.195 m
Barrel: 650 mm
Rifling: 4 grooves, 1 turn in 320 mm
Sights: fore, protected blade; rear, aperture; optical, PKS-07 × 7 daylight or PKN-03 night vision
Max effective range: 800-1,000 m

Manufacturer
IZHMASH, 3 Derjabin Street, 426006 Izhevsk, Russia.

Status
In production.

Service
Russian military forces.

UPDATED

SV-99 0.22LR sniper rifle

Development
The SV-99 is a compact, lightweight sniper rifle intended for special operations use during missions requiring the silent, close range elimination of sentries, guard dogs, security light and similar missions where the use of a full-power rifle would be inappropriate. As with the 7.62 mm SV-98 (see previous entry), the action of the SV-99 is derived from that of a competition rifle, in this case the Biathlon intended for winter sports competitions.

Description
The SV-99 is a straight pull bolt action rifle with locking involving a toggle action similar to that of the German Pistole 08. Since the SV-99 is intended to be deployed in a number of operational scenarios its configuration can be changed from rifle to long-barrelled pistol by replacing the butt-stock with a pistol grip. The laminated plywood butt-stock can be adjusted by the user for length of pull and cheekpiece height. A telescoping bipod is provided as standard and is attached via a rail in the forestock. The barrel is cold hammer forged.

The SV-99 can be rapidly disassembled and stored in its carrying case. The longest component of the stripped-down rifle, the barrel and receiver, is only 520 mm long.

The SV-99 safety is in front of the trigger guard and activated by moving it to the rear; this locks both the trigger and bolt action. Rounds are fed from one of three magazine capacities; five, eight and 10 rounds. Two spare five-round magazines are carried in a butt-stock compartment. A hinged plastic cover protects the magazine compartment.

There are no open sights as the SV-99 is equipped with a 4 × 34 fixed focus telescopic sight attached to the receiver via grooves that appear to be similar to Weaver type mounting grooves. Russian sources state that virtually any telescopic sight can be attached to these grooves, implying that they are of standard Weaver type.

Each SV-99 is issued with the following components as standard: two spare magazines; telescoping bipod; detachable pistol grip; suppressor; sling and cleaning kit.

Specifications
Cartridge: 0.22LR
Operation: manual, straight pull bolt action
Locking: toggle joint
Feed: 5-, 8- or 10-round detachable box magazine
Weight: 3.75 kg
Length: 1 m
Barrel: 350 mm
Rifling: 6 grooves, rh, 1 turn in 420 mm
Sights: optical only, 4 × 34 fixed focus
Max effective range: 100 m

Manufacturer
IZHMASH, 3 Derjabin Street, 426006 Izhevsk, Russia.

Status
In production.

Service
Russian military forces.

UPDATED

SV-99 0.22LR mm sniper rifle (V Shilin) 0063236

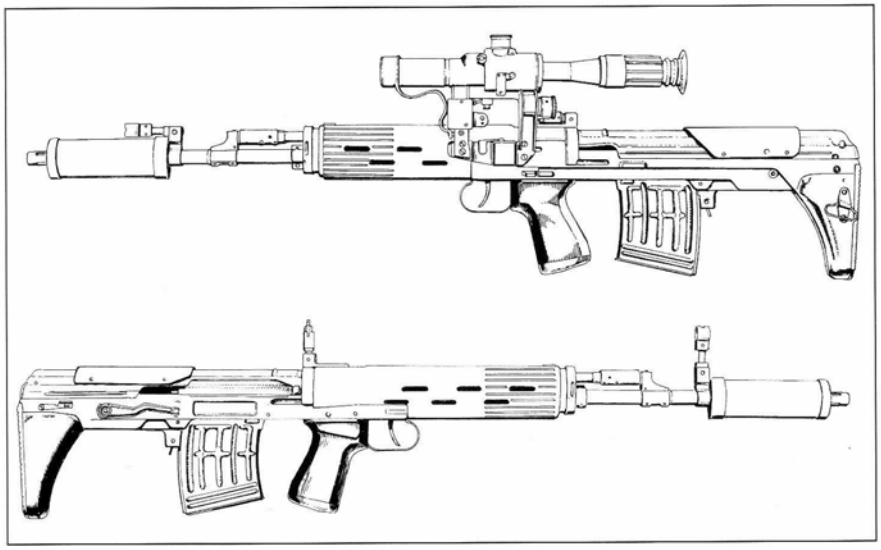
SV-99 0.22LR mm sniper rifle stripped down for transport (V Shilin) 0063237

OTs-03AS Dragunov 7.62 mm sniper assault rifle (SVU)

Description
The OTs-03AS Dragunov 7.62 mm sniper assault rifle, or SVU, is a much revised version of the SVD rifle (see previous entry) altered to assume a bullpup layout and capable of selective fire. It was developed to meet the requirements of special sub-units of internal affairs agencies and the internal security troops of the Ministry of Internal Affairs of the Russian Federation. It was first observed in action during 1994 when numbers were used during the initial phases of the fighting in Chechnya.

Two designations have been encountered relating to this weapon. As far as can be determined the term SVU refers to the rifle in its basic form with iron sights. With a PSO-1 optical sight and an optional bipod in position the combination becomes the OTs-03AS.

On the SVU/OTs-03AS the main visible change has been the elimination of the butt and its replacement by a rudimentary plate. The trigger group has been moved forward of the magazine and the barrel is provided with a prominent cylindrical housing which acts as a combined flash hider and partial sound suppressor.



Dragunov 7.62 mm sniper assault rifle (SVU) with PSO-1 optical sight fitted (top) and with iron sights raised (bottom) (L Haywood)

automatically at a cyclic fire rate of 880 rds/min although the 10-round magazine capacity will seriously limit burst fire. This feature is therefore intended to be employed only as an emergency measure.

A standard bayonet can be fitted under the forestock. A PSO-1 optical sight is a virtual fixture, although the rifle has rear and front iron sights on folding posts, similar to those provided on the 5.45 mm ASN rifle. On the OTs-03AS the bipod position can be switched to the side to provide aiming assistance by steadying the rifle against a wall or other structure.

Specifications

OTS-03AS
Cartridge: 7.62 × 54R
Operation: gas, short-stroke piston, selective fire
Locking: rotating bolt
Feed: 10-round box magazine
Weight: empty with PSO-1, 5.5 kg
Length: 900 mm
Rifling: 4 grooves, rh, 1 turn in 254 mm
Sights: fore, folding, post inside ring; rear, folding U-notch; PSO-1 optical telescope
Sight radius: 423 mm
Muzzle velocity: 830 m/s
Rate of fire: cyclic, 880 rds/min
Max effective range: against personnel, 800 m; against soft skin materiel, 1,300 m

Manufacturers

Sporting and Hunting Guns Central Research and Design Bureau, 17 Krasnoarmensky Prospect, 300041 Tula, Russia.
KBP Instrument Design Bureau, Tula 300001, Russia.

Status

In production. Offered for export sales.

Service

Internal security troops of the Ministry of Internal Affairs of the Russian Federation.

VERIFIED

OTs-14 Groza special weapon system

Development

The OTs-14 Groza (Thunderstorm) special weapon system was developed during 1992-1994 by a Sporting and Hunting Guns Central Research and Design Bureau (TsKIB SOO) team headed by Valery Telesh, the designer of the GP-25 and GP-30 underbarrel grenade launchers, and Yu V Lebedev. The team set out to design an integrated system that would incorporate all the desirable features of a close combat arm into a single weapon using the AKS-74U Kalashnikov as a starting point. Work began on the project in December 1992. Prototypes were ready for testing in less than a year and the OTs-14 was ready for production early in 1994. It had its first public showing at the Milipol Moscow trade show in April 1994 and was adopted by the Interior Ministry (MVD) shortly thereafter.

The weapon was originally intended to have used any one of four cartridges: 5.45 × 39 mm; 5.56 × 45 mm; 7.62 × 39 mm; or 9 × 39 mm. That idea was dropped and the OTs-14 was originally chambered in 9 × 39 mm to meet the MVD's requirement for a close combat weapon to be used in Chechnya.

The success of the OTs-14 in the hands of MVD troops brought it to the attention of the Ministry of Defence, who also had a requirement for such a weapon. After testing, the OTs-14 was adopted for SPETsNAZ forces and some airborne and specialist front-line combat specialists such as combat engineers, but in 7.62 × 39 mm. However, a shortage of funds has, as yet, prevented the 7.62 mm military version being adopted in significant numbers.

The weapon has been offered for export and presumably is available in any one of the four calibres for which it was originally developed.

The base 9 mm Groza has been referred to as the Groza-9/40 while the base 7.62 mm version is the Groza-7.62/40. In both cases the /40 denotes the ability to incorporate a 40 mm grenade launcher.

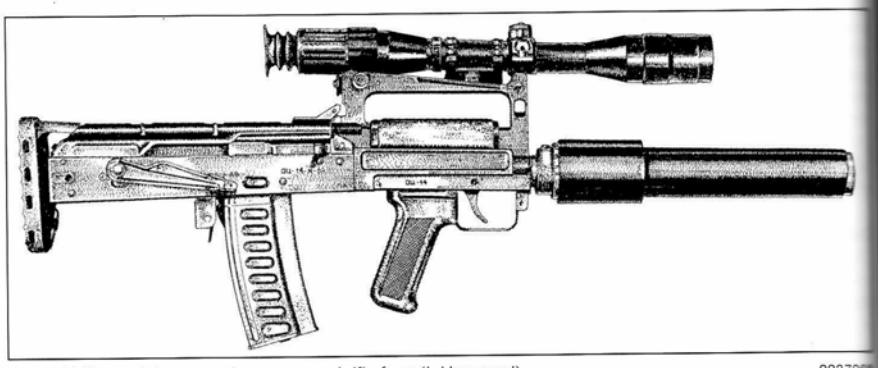
Description

The OTs-14 Groza is a small arms weapons system based on the Kalashnikov AKS-74U; the two weapons share a 75 per cent component commonality. It is issued in an aluminium carrying case with equipment and accessories to equip it for virtually any mission. Included in the case are two different grip and trigger assemblies, one for use with the modified GP-25/30 grenade launcher and another for use when the launcher is detached.

When the grenade launcher is installed, the single OTs-14 trigger fires both the rifle and the grenade launcher. A selector on left side of the grip allows the operator to select between rifle or grenade barrels. When the grenade launcher is detached, it is replaced by a vertical grip. A suppressor is also included in the issue kit, as is a quick-change short barrel for use with the suppressor or for when maximum compactness is desired. There is a PSO or PSO-1 telescopic sight which mounts directly onto the OTs-14 carrying handle or, on early models, onto a bracket on the left-hand side of the receiver. The OTs-14 will also accept all standard night vision optics.

The OTs-14 has four standard configurations designated by number, probably so operators can easily and quickly be told how to configure their weapons for the mission at hand without divulging details. The basic OTs-14 configuration is with the grenade launcher and this is designated OTs-14-4A. Without the grenade launcher it is designated OTs-14-4A-01. Changing to the short barrel gives the designation OTs-14-4A-02; adding the suppressor results in the designation OTs-14-4A-03.

The OTs-14 Groza-7.62/40 with a 30-round magazine fires the 7.62 × 39 mm M1943 cartridge, plus the subsonic 57N231U cartridge when a suppressor is involved. The barrel is longer on the 7.62 mm model so a wooden forestock is provided under the barrel.



Groza-9/40 special weapon in suppressed rifle form (L Haywood) 0037068

Specifications

Groza-9/40
Cartridge: 9 mm × 39 mm SP-5, SP-6 and PAB-9; 40 mm VOG-25 and VOG-25P grenades
Operation: gas, selective fire
Locking: rotating bolt
Feed: 20-round box magazine
Weight: rifle only, 2.7 kg; rifle with grenade launcher, 4 kg; suppressor, 480 g; optical sight, 360 g
Length: rifle, 500 mm; rifle with suppressor, 720 mm; rifle with grenade launcher, 625 mm
Sights: fore, post; rear, leaf sights on drum with 50, 100, 150 and 200 m steps; PSO or PSO-1 optical sight optional
Muzzle velocity: rifle, 300 m/s; grenade, 76 m/s
Rate of fire: rifle, cyclic, 700 rds/min
Max effective range: rifle, 400 m; grenade launcher, 400 m

Groza-7.62/40
Cartridge: 7.62 mm × 39 mm M1943 and 57N231U; 40 mm VOG-25 and VOG-25P grenades
Operation: gas, selective fire
Locking: rotating bolt
Feed: 30-round box magazine
Weight: rifle only, 3.1 kg; rifle with grenade launcher, 4.1 kg; suppressor, 600 g; optical sight, 360 g
Length: rifle, 700 mm; rifle with suppressor, 840 mm; rifle with grenade launcher, 700 mm
Sights: fore, post; rear, leaf sights on drum with 50, 100, 150 and 200 m steps; PSO or PSO-1 optical sight optional
Muzzle velocity: rifle, 750 m/s; grenade, 76 m/s
Rate of fire: rifle, cyclic, 750 rds/min
Max effective range: rifle, 600 m; grenade launcher, 400 m

Manufacturers

Sporting and Hunting Guns Central Research and Design Bureau (TsKIB SOO), 17 Krasnoarmensky Prospect, Tula 300041, Russia.
KBP Instrument Design Bureau, Tula 300001, Russia.

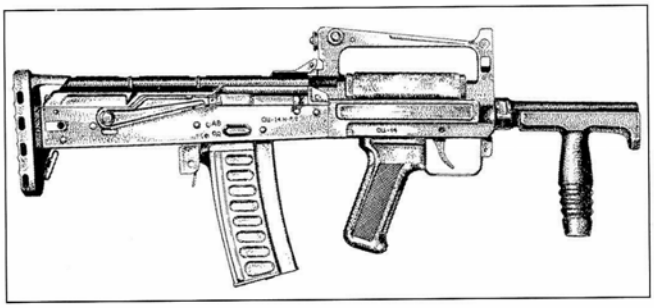
Status

In production. Offered for export sales.

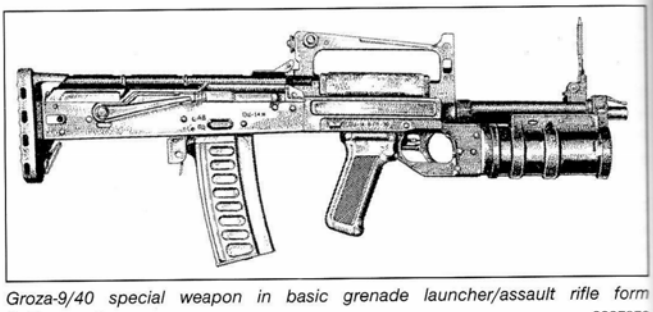
Service

Russian Interior Ministry (MVD) and military special forces.

VERIFIED



Groza-9/40 special weapon in assault rifle form (L Haywood) 0037069



Groza-9/40 special weapon in basic grenade launcher/assault rifle form (L Haywood) 0037070

5.66 mm APS underwater assault rifle

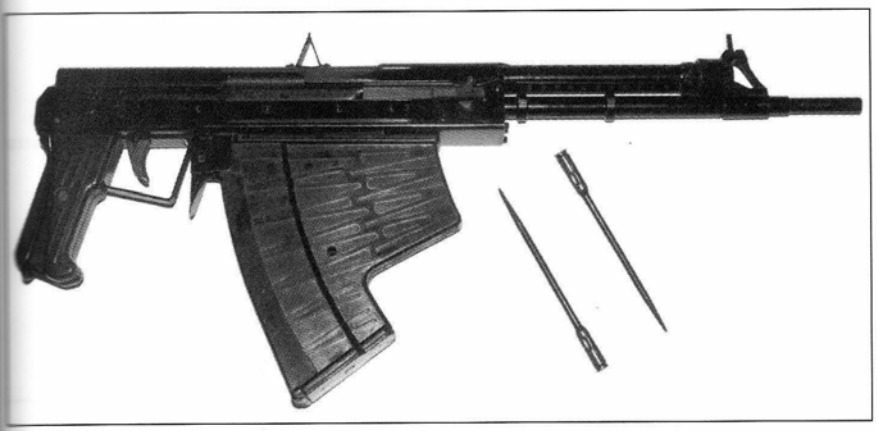
Description

Although underwater weapons have been in supply to various special forces for some years, this is the first of the class which has been formally acknowledged and on which some information has been released. It is intended for arming combat swimmers and it is also possible to use the rifle on land.

The underwater assault rifle is a selective-fire, gas-operated weapon, the mechanism of which appears to be broadly based upon the Kalashnikov rotating bolt system. It is of fairly conventional appearance and has a folding butt. The most distinctive feature is the magazine, necessarily large because of the ammunition used.

The projectile is a drag-stabilised dart, the rear end of which is held in a conventional cartridge case apparently based on that for the 5.56 × 45 mm NATO. The dart is 120 mm long and the complete round 150 mm long, the reasons for the abnormal front-to-back depth of the magazine. Each MPS cartridge weighs 27.5 g of which 20.2 g is the bullet.

The muzzle velocity is 350-365 m/s, but the effective range in air is only 100 m. The range underwater varies according to the depth, from 30 m at 5 m depth to 11 m at 40 m depth. At these ranges the dart will penetrate the usual types of underwater suit and also 5 mm of acrylic plastic face mask to inflict fatal wounds.



5.66 mm APS underwater assault rifle (T J Gander)

Specifications

Cartridge: 5.66 mm Model MPS
Operation: gas
Feed: 26-round box magazine
Weight: empty, 2.4 kg; with empty magazine, 2.7 kg; loaded, 3.4 kg
Length: butt folded, 614 mm; butt extended, 823 mm
Height: 252 mm
Width: 65 mm
Muzzle velocity: in air, 350-365 m/s
Lethal range: in air, 100 m; in water 5 m deep, 30 m; in water 20 m deep, 20 m; in water 40 m deep, 11 m

Manufacturer

Institute of Precise Mechanical Engineering, Izhevsk, Russia.

Marketing agency

Rosoboronexport Federal State Unitary Enterprise, 21 Gogolevsky Boulevard, 119865 Moscow, Russia.

Status

In production. Offered for export sales.

Service

RFAS special forces and Navy.

VERIFIED

SOUTH AFRICA

Truvelo Armoury SG1 high precision rifles

Development

The Truvelo Armoury have designed and developed a family of basically similar high precision rifles for sniping and other specialist purposes, all under the general title of SG1 (ScharfschützenGewehr 1). The SG1 rifles are all basically similar but differ in the calibre involved. Calibres can include 7.62 × 51 mm NATO/0.308 Winchester, 0.300 Winchester Magnum and 0.338 Lapua Magnum, although other calibres could be provided. For each calibre alternative versions with either single shot or magazine feed are offered. Other alternatives could include various buttstock variants.

Specifications

Cartridge	7.62 × 51 mm	0.300 Winchester Magnum	0.338 Lapua Magnum
Operation	bolt action	bolt action	bolt action
Feed	single-shot or magazine	single-shot or magazine	single-shot or magazine
Weight	8 kg	8 kg	8.5 kg
Length	1.19 m	1.19 m	1.19 m
Barrel	765 mm	765 mm	750 mm
Max effective range	500 m	600 m	800 m

All the SG1 rifles are designed and constructed on a 'no compromise' basis. Using suitable ammunition, all models can expect an accuracy performance of 0.5 Minute Of Angle (MOA).

Truvelo Armoury SG1 0.338 Lapua Magnum sniper rifle (T J Gander) 0064531

Truvelo Armoury SG1 0.300 Winchester Magnum sniper rifle with magazine feed (T J Gander)

Description

Whatever calibre is involved, each SG1 rifle is manufactured using the same basic elements. The bolt action is computer machined from solid EN24 steel (equivalent to 817M40). The stock is machined from aircraft-grade aluminium and is adjustable in height. The rubber butt pad is also adjustable for height. A cheek piece is provided while the polymer pistol grip is adjustable for trigger reach. Also adjustable for height is the folding bipod.

The barrel is manufactured using EN19 steel (equivalent to 709M40) and is button rifled to give a smooth and work-hardened inner surface for consistency and accuracy. A muzzle brake can be provided on rifles firing the more powerful cartridges. If required, a sound suppressor can be installed over the muzzle.

No iron sights are provided and the choice of optical sights is left to the user. If required, a MIL-STD-1913 mounting rail can be secured over the receiver, although other sight mountings can be provided.

The specifications provided here should be regarded as a general guide only.

Manufacturer

Truvelo Armoury, PO Box 14183, Lyttelton 0140.

Status

In production.

VERIFIED

SPAIN

Santa Barbara 7.62 mm C-75 special forces rifle

Description

The Santa Barbara 7.62 mm C-75 special forces rifle is a conventional bolt-action rifle, using a Mauser action, intended for sniping, police and special forces tasks. Fitted with iron sights as standard, it also has telescope mounts machined into the receiver and can thus be equipped with virtually any optical or electro-optical sight. With a telescope, match ammunition and a skilled firer, it is capable of effective fire out to 1,500 m range. It is also provided with a muzzle cup launcher for discharging various riot control devices, such as rubber balls, smoke canisters or CS gas grenades, by use of a standard grenade-discharging cartridge. It is not suited to firing combat types of grenade.

No data other than the weight, 3.7 kg, is available.

Santa Barbara 7.62 mm C-75 special forces rifle

Manufacturer

General Dynamics Santa Barbara Sistemas, Manuel Cortina 2, E-28010 Madrid.

Status

Available.

Service

Spanish police and paramilitary organisations.

UPDATED

SWITZERLAND

SAN Swiss Arms 5.56 mm SG550 sniper rifle

Description

The SAN Swiss Arms 5.56 mm SG550 sniper rifle was developed from the standard SG550 assault rifle and is a semi-automatic version developed in close co-operation with special police units. The accuracy is the result of the heavy hammer-forged barrel and low recoil, and there is a sensitive double-pull trigger. The semi-automatic action gives the sniper the ability to fire a very fast second shot if necessary.

The rifle carries a fully adjustable bipod and folding butt, the pistol grip is adjustable for rake and has an adjustable hand rest. The sighting telescope can be altered alongside and at right-angles to the sight base in such a way that the head leans naturally against the cheek rest and takes up the correct position relative to the line of sight. There are no iron sights fitted.

Accessories include a spare magazine, sling, mirage band, bipod, carrying case, cleaning kit and sight cleaning equipment.

SAN Swiss Arms 5.56 mm SG550 sniper rifle with telescope sight

Specifications

Cartridge: 5.56 × 45 mm
Operation: gas, semi-automatic
Locking: rotating bolt
Feed: 20- or 30-round box magazine
Weight: empty, without magazine, 7.02 kg
Weight of magazine: empty, 95 g; with 20 rounds, 340 g; with 30 rounds, 480 g
Length: butt folded, 905 mm; butt extended, 1.13 m
Barrel: 650 mm
Rifling: 6 grooves, rh, 1 turn in 254 mm
Trigger pull: first pressure, 800 g; second pressure, 1.5 kg
Muzzle energy: ca 1,820 J, depending on ammunition

Manufacturer

SAN Swiss Arms AG, CH-8212 Neuhausen-Rheinfalls.

Status

In production.

Service

Swiss police; Jordan police.

UPDATED

SAN Swiss Arms 7.62 mm SSG 2000 sniper rifle

Description

The SAN Swiss Arms (formerly SIG-Sauer) 7.62 mm SSG 2000 rifle was purpose built for military, law enforcement and target marksmanship. The weapon is based on the bolt action of the Sauer 80/90 repeating rifle, also known as the Sauer 200 STR (Scandinavian Target Rifle), of which more than 18,000 units have been produced. This bolt action uses hinged lugs at the rear end of the bolt which are driven outwards, to lock into the receiver, by the action of cams driven by the rotation of the bolt handle. The bolt body is non-rotating, giving very positive case extraction. This design results in a reduction in the angular travel of the bolt to only 65° and gives a fast and smooth loading action.

The heavy hammer-forged barrel is equipped with a combination flash hider and muzzle brake, providing excellent weapon recovery and allowing a fast, controlled, follow-up shot.

The ergonomic thumb-hole stock can be optimally adjusted to suit the firer; right- and left-hand stocks are available.

The trigger is of the double set pattern. The sliding safety catch has a triple function: blocking of the sear, the sear pivot and the bolt itself. The bolt can be opened when the safety catch is applied; the set trigger can be decocked by pulling the trigger when the weapon is in the safe condition and is automatically decocked when the bolt is opened. There is a signal pin to indicate when a round is in the chamber.

No iron sights are fitted; standard equipment includes a Schmidt & Bender × 1.5 to × 6 × 42 or Zeiss Diatal ZA 8 × 56T telescope sight.

The SSG 2000 is available in 7.62 × 51 mm (0.308 Winchester), 0.300 Weatherby Magnum, 5.56 × 45 mm and 7.5 × 55 mm Swiss calibres; the data which follows is for the 7.62 × 51 mm version.

Specifications

Cartridge: 7.62 × 51 mm NATO (also see text)
Operation: bolt action, single shot
Feed: 4-round box magazine
Weight: with magazine and sight, 6.6 kg
Length: 1.21 m
Barrel: excluding flash hider, 610 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Trigger pull: standard, 18 N; set, 3 N
Muzzle velocity: 750 m/s, depending upon ammunition
Muzzle energy: 3,500 J, depending upon ammunition

Manufacturers
SAN Swiss Arms AG, CH-8212 Neuhausen-Rheinfalls.

Status
In production.

Service
Swiss police forces, Argentine Gendarmerie National, Police Force of Kingdom of Jordan, Hong Kong Police, Malaysian Police Kuala Lumpur, combined service forces of Taiwan, some UK police forces and others.

UPDATED

SAN Swiss Arms 7.62 mm SSG 2000 sniper rifle

SAN Swiss Arms 7.62 mm SSG 3000 sniper rifle

Description

The SAN Swiss Arms (formerly SIG-Sauer) 7.62 mm SSG 3000 sniper rifle is a precision bolt-action repeating rifle incorporating the latest firearms technology developed from the base of the Sauer 200 STR target rifle. The rifle is on a modular system: the barrel and receiver are joined by screw clamps, the trigger system and magazine form a single unit which fits into the receiver and the stock is of non-warping wood laminate. The receiver housing is machined from a single billet; lock-up, with six locking lugs, is between bolt and barrel, thus the stress on the bolt upon firing is not transmitted to the receiver. A light firing pin and short striking distance endow the rifle with an exceptionally short lock time. The barrel is heavy, cold-swaged and fitted with a combined muzzle brake and flash suppressor.

Two precision trigger actions, adjustable for both length and take-up weight, are available, these being single-stage or double-stage patterns. The sliding safety catch, above the trigger, locks the trigger, firing pin and bolt. A signal pin at the end of the striker head indicates whether the rifle is cocked.

The stock was ergonomically designed, allowing the weapon to be held in position for extended periods without fatigue. The butt-plate can be adjusted for height, length, offset and rake and the entire system – stock, bolt and receiver – is available as a completely left-handed version. A rail integrated into the fore-end accepts the bipod and the carrying or firing sling.

There are no iron sights, the rifle being intended solely for use with a telescope; the normal mount is designed to operate with the recommended sight, the Hensoldt × 1.5 to × 6 × 24BL, which is manufactured specifically for the SSG 3000 rifle, but a NATO STANAG sight base is available if preferred.

For practice purposes a 0.22 LR conversion kit is available.

SAN Swiss Arms 7.62 mm SSG 3000 sniper rifle

Specifications

Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 5-round box magazine
Weight: with empty magazine and without sight, 5.4 kg; with empty magazine and sight, 6.2 kg
Length: ca 1.18 m (depending upon stock adjustment)
Barrel: excluding flash suppressor, 610 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Muzzle velocity: 750 m/s, depending on ammunition
Muzzle energy: 3,500 J, depending on ammunition

Manufacturers

SAN Swiss Arms AG, CH-8212 Neuhausen-Rheinfalls.

Status

In production.

UPDATED

UNITED KINGDOM

7.62 mm Enfield L39A1 rifle

Development

The 7.62 mm L39A1 rifle was introduced during the late 1960s to provide a satisfactory target rifle for competitive shooting by armed forces units. At that time the L1A1 rifle was unsuitable for serious target shooting and the decision was made to produce target rifles from selected 0.303 No 4 rifles held in ordnance depots.

The Enfield Envoy was a commercial variant of the L39A1.

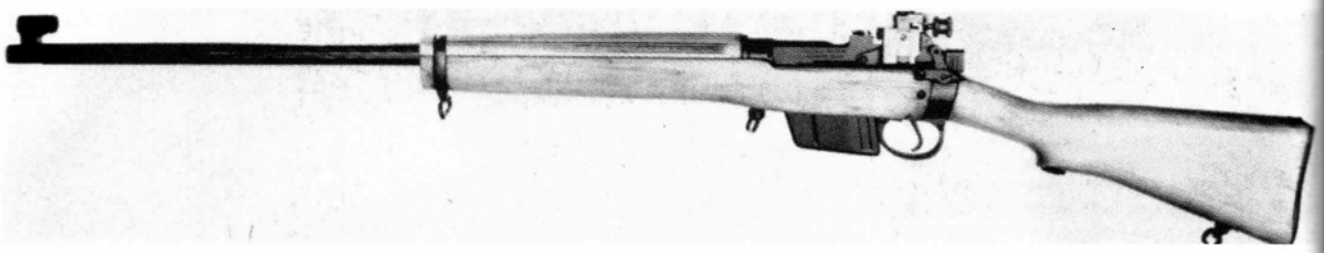
Description

The 7.62 mm L39A1 is a manually operated bolt-action single-shot rifle with a heavy 7.62 mm barrel, having the necessary modifications to the extractor and receiver to permit the use of 7.62 × 51 mm ammunition.

The barrel is produced using the cold-forging process. A foresight block is soldered to the barrel but no foresight is fitted. Commercial target sights are fitted by the using unit.

The barrel projects from the wooden fore-end for 381 mm. The butt is unchanged from the No 4 rifle except that a recess has been machined under the knuckle to take a container holding spare foresight blades. The handguard is the same pattern as that on the No 8 0.22 training rifle.

The rifle is proved for 7.62 x 51 mm ammunition



7.62 mm L39A1 rifle

0.303 Mark VII and, in addition to the usual military proof marks of crown, ER and crossed flags with the letter P, the receiver, bolt and bolt head are stamped 19T. There are four sizes of bolt head available, marked 0, 1, 2 and 3 in ascending size, for ensuring correct cartridge head space.

The prime purpose of the weapon is competition shooting. Since rounds are usually hand fed into the chamber the only service required from the magazine is the provision of a platform to support the round while this is done. For this purpose the original 0.303 magazines are retained. There is no positive ejector when this magazine is used. A groove in the left of the receiver becomes shallower towards the rear and the friction between the side of the case and the groove tips the mouth of the case to the right and the extractor loses its grip. As an alternative, a 7.62 mm magazine holding 10 rounds can be provided. It has an ejector plate spot-welded to the lip at the left rear.

Specifications

Cartridge: 7.62 × 51 mm NATO
Operation: manual, single shot
Locking: rotating bolt
Feed: 10-round box magazine
Weight: 4.42 kg
Trigger pull: first pull, 1.13-1.59 kg; second pull, 1.81-2.04 kg
Length: 1.18 m
Barrel: 700 mm
Rifling: 4 grooves, rh, 1 turn in 305 mm
Sights: competition sights attached as required by user
Muzzle velocity: 841 m/s

Manufacturer

Royal Small Arms Factory, Enfield Lock (now closed).

Status

No longer manufactured.

Service

UK armed forces.

VERIFIED

Parker-Hale 7.62 mm Model 83 target rifle

Description

This rifle was developed by Parker-Hale from their PH1200TX target rifle. It is a single-shot rifle, the absence of a magazine and feedway allowing the action to be stiffened and thus improving accuracy.

The rifling was specially matched to the standard 144 grain 7.62 mm NATO bullet and is hand-bedded with Devcon F metal compound for the entire length of the action body. Accuracy is within half-minute of arc for 10 rounds, depending upon the quality of the ammunition.

The target trigger is single stage and fully adjustable for weight, creep and backlash. Lock time is relatively fast because of a striker travel of only 7 mm. The length of stock is adjustable to 317.5, 330 or 343 mm. The sights are fully adjustable and a variety of foresight elements are provided to suit individual users.

The Model 83 rifle was adopted by the UK Ministry of Defence as the Cadet Training Rifle L81A1 and entered service in early 1983.

Specifications

Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Weight: 4.98 kg; barrel, 2.04 kg
Length: 1.187 m
Sights: fore, tunnel with removable ring or blade; rear, fully adjustable, aperture, 6 holes

Manufacturer

Parker-Hale Limited, Bisley Works, Golden Hillock Road, Birmingham B11 2PZ.

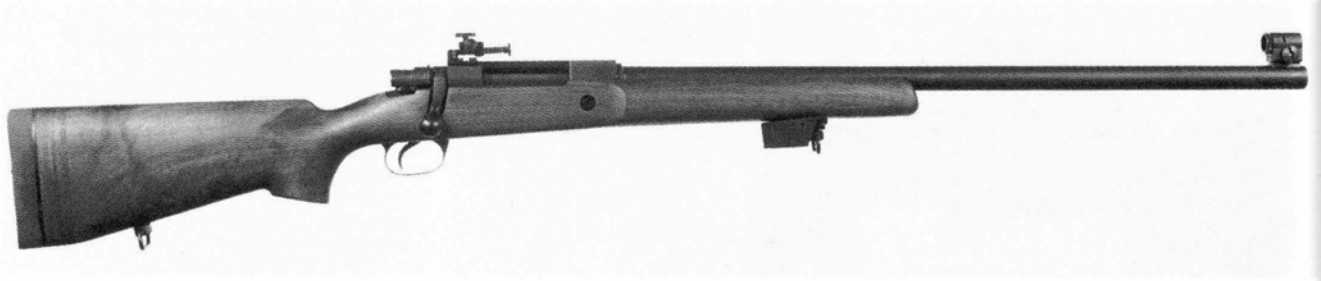
Status

No longer in production.

Service

British cadet forces.

VERIFIED



Parker-Hale 7.62 mm Model 83 target rifle

Accuracy International 7.62 mm PM sniper rifle system

Description

The Accuracy International 7.62 mm PM sniper rifle was designed from the start as a military sniper rifle, intended to put its first shot on target, in any conditions, from a clean or fouled barrel. Developed by Accuracy International, it was adopted by the British Army and designated L96A1. The initial order was for 1,212 units, all of which have been delivered.

Description

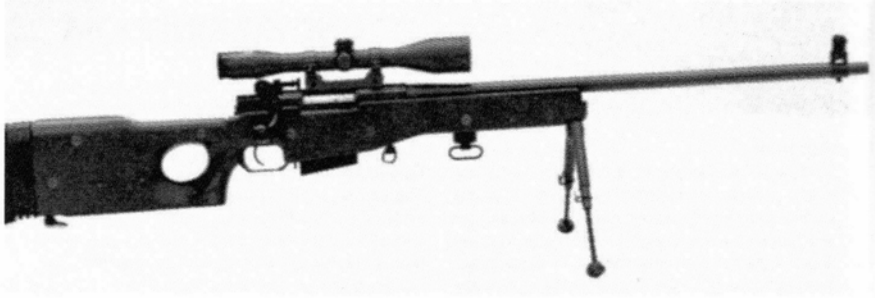
The Accuracy International 7.62 mm PM sniper rifle uses an aluminium frame to which the components are firmly attached. This is then clad in a high-impact plastic stock in which the stainless steel barrel floats freely. The bolt action is of conventional form, the bolt having three forward locking lugs and a safety lug at the handle. Bolt lift on opening is 60° and bolt throw is 107 mm allowing the firer to keep his head on the cheek rest while operating the bolt and thus keep observation on his target while reloading. The rifle is equipped with a light-alloy bipod which is fully adjustable.

The infantry version has fully adjustable iron sights for use out to 700 m, but is routinely fitted with a special design Schmidt & Bender 6 × 42 telescopic sight designated the L1A1. The accuracy requirement stated by the British Army was for a first round hit at 600 m range and accurate harassing fire out to 1,000 m range. This has been achieved by the PM, which has an accuracy figure better than 0.75 minutes of arc.

The counter-terrorist version is fitted with a × 10, × 2.5 to × 10 as well as the infantry 6 × 42 sight. A spring-loaded monopod is usually fitted, which is concealed in the butt. This can be lowered and adjusted so that the rifle can be laid on the target and supported while the firer observes, without having to support the weight of the rifle for long periods. A spiral flash hider is fitted to the muzzle. Iron sights are not normally fitted to this version.

A suppressed rifle is also produced. Using special subsonic ammunition, this rifle is accurate out to 300 m without unreasonable trajectory or wind deflection. This increases the accepted state of the art by at least 100 m.

The PM was produced in single-shot Magnum calibres for long-range anti-terrorist work; calibres

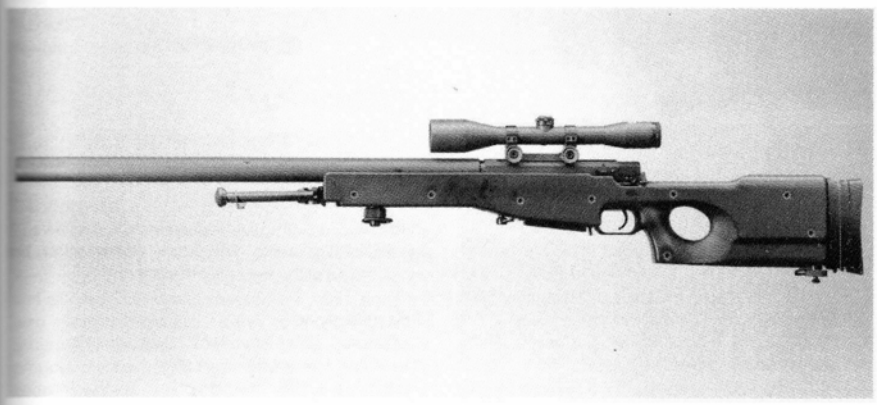


Accuracy International 7.62 mm 'PM Infantry' sniper rifle

available included 0.300 Winchester Magnum and 7 mm Remington Magnum for use up to 1,000 m range, and an 8.6 mm cartridge was under development for use at ranges up to and exceeding 1,000 m.

Variant

'Covert' sniper rifle system
See separate entry.



Accuracy International 7.62 mm suppressed sniper rifle with PM 6 × 42 sight

Specifications

Infantry version
Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 10-round box magazine
Weight: 6.5 kg
Length: 1.124-1.194 m
Barrel: 655 mm
Trigger: 2-stage adjustable, 1-2 kg
Sights: Schmidt & Bender PM 6 × 42

Manufacturer

Accuracy International, PO Box 81, Portsmouth, Hampshire PO3 5SJ.

Status

No longer in production.

Service

British Army (1,212) and several African, Middle East and Asian armies.

VERIFIED

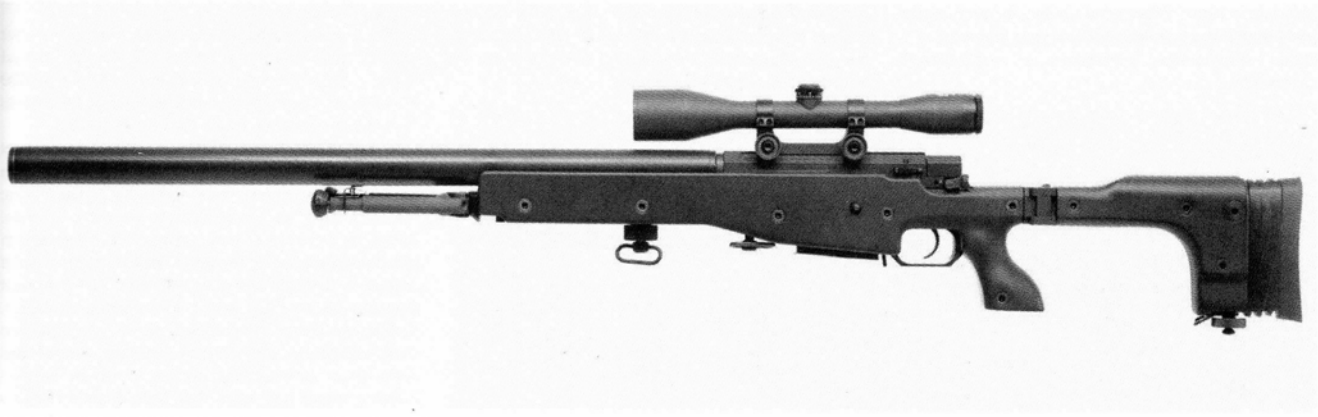
Accuracy International AW 'Covert' sniper rifle system

Description

One variant of the Accuracy International system is the AW 'Covert'. The system consists of the suppressed AWMP rifle in a take-down version with a folding stock which, together with all its ancillaries, packs into an airline suitcase with fitted wheels and retractable handle.

The rifle is the 'Covert' folding AWMP bolt-action repeating rifle fitted with either the PM 6 × 42, 10 × 42 or 3-12 × 50 Schmidt & Bender military sights, two 10-shot magazines, bipod and one box containing 20 rounds of subsonic ammunition.

Accuracy International AW 'Covert' sniper rifle dismantled, with carrying case



Accuracy International 7.62 mm AW 'Covert' sniper rifle

Specifications

Rifle only
Cartridge: 7.62 × 51 mm subsonic
Operation: bolt action, single shot
Feed: 10-round box magazine
Weight: 6 kg
Length: 1.2 m
Trigger: 1-2 kg pull-off, two-stage detachable
Muzzle velocity: 314-330 m/s
Range: 0-300 m
Suppression: 85 dBA over 125 ms timebase with subsonic ammunition. With full power ammunition, 109 dBA over 125 ms timebase.

Manufacturer

Accuracy International, PO Box 81, Portsmouth, Hampshire PO3 5SJ.

Status

Available to order.

UPDATED

Accuracy International 7.62 mm AW sniper rifle

Development

The Accuracy International 7.62 mm AW sniper rifle is the result of further development and enhancement of the L96A1 sniper rifle (qv) to suit requirements stipulated during trials for a new army sniper rifle. This rifle is thus the 'second-generation' sniper rifle from Accuracy International and took over from the L96A1 when outstanding orders were fulfilled.

Designated the *Prickskyttegevär 90*, or *Psg 90*, by the Swedish armed forces, who have adopted it, the AW is to the same basic design concept as the L96A1. The Swedish Army had not hitherto had a dedicated sniper wing and so were able to take a completely fresh approach to their requirements. The rifle successfully underwent four years of trials and development in temperatures below –30°C.

The Netherlands Army Special Forces obtained 10 AW rifles during 1997. These were for service in Bosnia and are provided with Schmidt and Bender 6 × 42 optical sights.

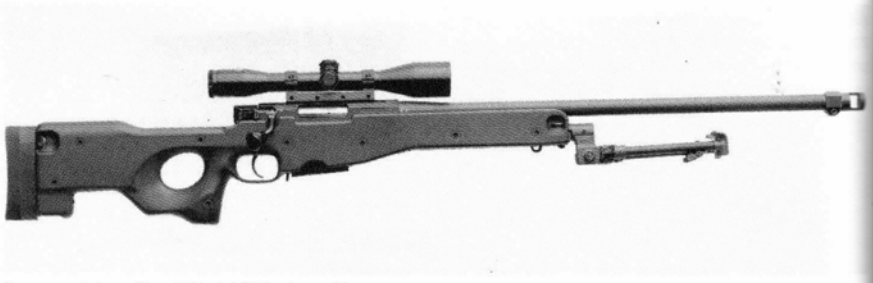
A batch of 10 AW rifles was obtained by the Italian Army during 1997. An outstanding requirement for a further 282 rifles is known to exist.

The Australian Army procured 166 7.62 mm AW-F rifles with folding stocks and MIL-STD-1913 Picatinny scope mounting rails. In service from 1999 onwards, they are known as the SR98. The optical sight selected by the Australian Army is the Schmidt and Bender 3-12 x 50 variable telescopic sight.

Description

The design of the Accuracy International 7.62 mm AW sniper rifle incorporates anti-freeze mechanisms, a different shroud, three-way safety, smooth bolt manipulation, a muzzle brake, simpler and more robust detachable iron sights, an improved bipod, multipoint sling attachments for sling or carrying harness and a ten-round magazine. For the Swedish Army the rifle is fitted with a Hensoldt 10 × 42 Mil Dot Reticle with tritium lighting for night operation.

Part of the sniping package used by the Swedish Army is subcalibre saboted ammunition with a muzzle velocity of about 1,340 m/s. This subcalibre ammunition is in service with the Swedish armed forces, along with 7.62 × 51 mm Ball, Tracer and Blank.



Accuracy International Model AW sniper rifle

A folding butt stock is available as an option. This adds 200 g to the overall weight but, when folded, reduces the overall length by 200 mm. Other options include an adjustable cheekpiece, an adjustable butt plate, an adjustable height third leg spike for under the butt, and a Picatinny rail interface.

Screw-on muzzle suppressors are available to remove flash and reduce the sound signature. Normal full power ammunition can be used with these suppressors.

Variants

AWP model

The AWP model is a further refinement of the AW. Enhancements introduced include a 610 mm long stainless steel barrel, a multi-adjustable butt pad and a corresponding handstop/bipod mounting which offers flexibility of firing height and better stability when firing over a parapet. The preferred sight for this model is a Schmidt & Bender military pattern 3-12x variable telescopic sight. There is no muzzle brake so iron sights and suppressors cannot be fitted.

AWMP model

The AWMP model is a fully suppressed version of the AW on which a fully integrated barrel and suppressor is interchanged with the standard barrel; the operation takes about 3 minutes. In this form the rifle is effective up to 600 m using full power ammunition but recalibration of the sights is necessary.

Specifications

Cartridge: 7.62 × 51 mm NATO (see also text)
Operation: bolt action, single shot
Feed: 10-round box magazine
Weight: AW and AWMP, empty, 6.4 kg; AWP, 6.8 kg
Length: AW, approx 1.18 m; AWMP, approx 1.2 m; AWP, approx 1.1 m
Barrel: AW, 660 mm; AWP, 610 mm or 510 mm
Rifling: AW, rh, 1 turn in 250 mm
Stock: chassis with plastic furniture
Trigger: 2-stage, 2-3 kg
Muzzle velocity: Ball, ca 850 m/s; subcalibre, ca 1,340 m/s; subsonic, 310 m/s

Manufacturer

Accuracy International, PO Box 81, Portsmouth PO3 5SJ.

Status

Available to order.

Service

Australian (166), Italian, Latvian, Swedish and Netherlands armed forces.

UPDATED

Accuracy International AWM Magnum sniper rifles

Description

The Accuracy International AWM Magnum sniper rifle was designed as a dedicated sniper rifle giving guaranteed accuracy, ease of maintenance, reliability and military robustness. All the lessons learned during the development of the L96A1 sniper rifle, together with many new and innovative ideas, were combined in this weapon.

Using the × 10 sight and 0.338 Lapua Magnum ammunition, the AWM is able to meet requirements for equipment destruction and light armour penetration, as well as the normal anti-personnel capability, to ranges well beyond 1,000 m. The 16.2 g bullet is still supersonic at 1,400 m, at which range there are still over 1,000 J of energy remaining.

The rifle is supplied in three calibres: 0.338 Lapua Magnum, 0.300 Winchester Magnum and 7 mm Remington Magnum. Special accuracy ammunition is under development to provide a multiprojectile capability.

Accuracy International AWM Magnum sniper rifle chambered for 0.338 Lapua Magnum ammunition (T J Gander)

0054734

A folding butt-stock is available as an option. This adds 200 g to the overall weight but, when folded, reduces the overall length by 200 mm. Other options include an adjustable cheekpiece, an adjustable butt-plate, an adjustable height third leg spike for under the butt, and a Picatinny rail interface.

Accuracy International AWM Magnum sniper rifle configured as Gewehr 22 (G22) for German Army and chambered for 0.300 Winchester Magnum ammunition (T J Gander)

0054732

In 1997 a total of 325 of these rifles were ordered by the Netherlands armed forces, 275 for the army and 50 for the air force.

The Accuracy International AWM Magnum sniper rifle has also been selected by the German armed forces. Their version is chambered for 0.300 Winchester Magnum ammunition and is known in German Army service as the Gewehr 22 (G22).

In early 1999 it was announced that a quantity of AWM rifles chambered for 0.338 Lapua Magnum ammunition had been ordered for the UK armed forces; the initial batch was understood to be about 90 units. Known as the L115A1 Long Range Rifle, this weapon has been allocated to the Joint Rapid Reaction Force (including 3 Commando Brigade and 16 Air Assault Brigade) where it is issued as a platoon weapon, providing platoon commanders with the capability to deal accurately with targets at long range. Ball ammunition is used for training, with an armour-piercing round held on a War Maintenance Reserve basis. The L115A1 can be used in conjunction with a compact spotting telescope and a laser rangefinder operated by a second member of the Long Range Rifle team.

Specifications
Cartridge: 0.338 Lapua Magnum (and see text)
Operation: bolt action, single shot
Locking: 6 lug bolt
Feed: 4- (0.338) or 5- (0.300, 7 mm) round box magazine
Weight: empty, approx 6.8 kg
Length: approx 1.23 m
Barrel: 0.338, 686 mm; 0.300, 7 mm, 660 mm
Muzzle velocity: 914 m/s

Manufacturer
Accuracy International, PO Box 81, Portsmouth, Hampshire PO3 5SJ.

Status
Available to order.

Service
UK, German and Netherlands armed forces.

UPDATED

Accuracy International Chassis System (AICS) kit

Description
The Accuracy International Chassis System (AICS) kit is an enhancement for existing short- and long-action Remington 700 rifles. It upgrades their general utility and extends their useful service life by enhancing the zero retention capability as well as the strength and accuracy of the rifle. In general terms the AICS kit provides a robust, environmentally stable, self-centring bedding system.

The complete kit consists of an ergonomically contoured ambidextrous stock in black or olive drab. A sturdy aluminium chassis system is located through the centre of the stock to accept the existing bolt action and the chamber end of the barrel. Other components include a detachable box magazine, connections for a Harris or Parker Hale pattern bipod, a fore-end rail for a handstop or adjustable bipod block, a butt spacer system and four swing swivels. Further customising can be introduced with an adjustable cheekpiece, a folding stock, a 10-round magazine and an adjustable butt-pad.

Manufacturer
Accuracy International, PO Box 81, Portsmouth, Hampshire PO3 5SJ.

Status
Available.

UPDATED

Accuracy International Chassis System (AICS) applied to a Remington 700 rifle (T J Gander) 0087881

Armalon BGR 7.62 mm sniper rifle

Description
The Armalon BGR 7.62 mm sniper rifle is a carefully designed bolt-action rifle manufactured from components from a number of specialist makers. The bolt action is a strengthened bench-rest action using three lugs and with a long and smooth bolt travel. The striker mechanism is carefully designed to have the shortest possible lock time and to ensure regular ignition even with the hardest primer caps. The match grade hammer-forged barrel is fluted to achieve stiffness without excess weight and also to afford the maximum heat dissipation. It is fitted with a combination muzzle brake and flash suppressor. The action and barrel are bedded into the stock by means of a specially developed compound and stocks are of wood, carbon fibre-reinforced co-polymer material or, for the lightest possible weight, a special composite carbon fibre, Kevlar and GRP material.

The rifle is fitted with an Anschutz pattern accessory rail which will accept a bipod, hand-rest or other accessories and is equipped with a suitable mount for a variety of telescope sights. Iron sights may be fitted to special order.

The BGR rifle was normally supplied in 7.62 × 51 mm NATO chambering. The BGR models has been replaced in production by the Armalon PR rifles (see separate entry).

BGR 7.62 mm sniper rifle

Specifications
Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 5- to 20-round detachable box magazines
Weight: with bipod and telescope sight, 6.6 kg
Length: 1.2 m
Barrel: 700 mm
Rifling: 4 grooves, rh, 1 turn in 280 mm
Sights: as required

Manufacturer
Armalon Limited, 44 Harrowby Street, London W1H 5HY.

Status
Production complete. Superceded by Armalon PR models.

UPDATED

Armalon PR rifles

Description
The Armalon PR rifle is based on the Remington 700 bolt action sniper rifle which has been extensively modified to increase the magazine capacity. It is available in two calibres, 5.56 × 45 mm (0.223 Remington) or 7.62 × 51 mm (0.308 Winchester).

Armalon 7.62 mm PR rifle with fluted barrel, muzzle

Numerous customised variations are available for rifles in both calibres, although the main attraction for many potential users is that the 7.62 mm rifles can accommodate 5-, 10-, 20- or 30-round magazines based on the M14/M1A patterns while the 5.56 mm models can accommodate modified M16/AR-15 magazines of 10-. 20- or 30-round capacity.

The basis of the PR rifle is a housing and trigger guard unit machined from high-grade aluminium alloy and anodised. The unit incorporates a new magazine release catch while some alterations are made to the receiver and stock.

Customer-led variations include barrels of various lengths with optional flutes, muzzle brakes, various patterns of stock, bipods, foregrips, variable bolt handles or knobs. Various types of optical and other sights can be used.

Armalon 5.56 mm PR rifle with 30-round magazine, bipod and Leupold Mark 4 M3 sight

Specifications

Cartridge: 7.62 × 51 mm or 5.56 × 45 mm
Operation: bolt action, repeater
Feed: 5-, 10-, 20- or 30-round detachable box magazines
Weight: with standard barrel, bipod, magazine and telescope sight, 5.5 kg; with fluted barrel, approx 4.8 kg
Length: standard, 1.15 m; with muzzle brake, 1.2 m
Barrel: standard, 650 mm
Rifling: 7.62 mm, 6 grooves, rh, 1 turn in 305 mm; 5.56 mm, 6 grooves, rh, 1 turn in 229 mm
Sights: as required

Manufacturer

Armalon Limited, 44 Harrowby Street, London W1H 5HY.

Status

In production.

UPDATED

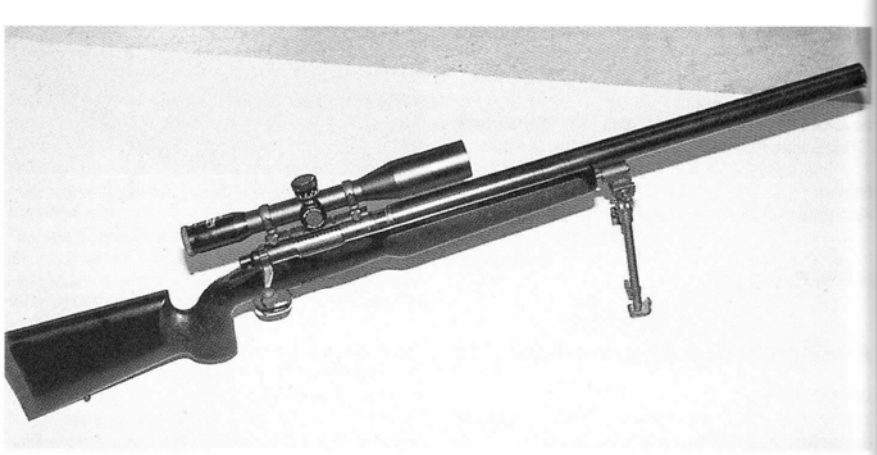
LEI 7.62 mm De Lisle Mk 4 suppressed sniper rifle

Description

The LEI De Lisle Mk 4 suppressed sniper rifle is based on the Remington 700 bolt action and is designed to use both subsonic and standard ball ammunition. The rifle makes extensive use of stainless steel in the suppressor assembly to reduce maintenance and increase suppressor life. The suppressor completely eliminates muzzle flash and, with subsonic ammunition, reduces the firing signature to a minimum. It can be easily removed without recourse to tools.

The use of a heavy match grade barrel provides outstanding accuracy at maximum range. With 7.62 mm subsonic ammunition the effective range is over 200 m. Using sniper grade ammunition, targets can be successfully engaged at ranges in excess of 400 m.

The LEI De Lisle Mk 4 is supplied without sights so users can select various models of optical and night sight to meet their specific requirements.



LEI 7.62 mm De Lisle Mk 4 suppressed sniper rifle (LEI)

Specifications

Cartridge: 7.62 × 51 mm subsonic or Ball
Operation: bolt action
Feed: 4-round box magazine
Weight: without sights, 4.5 kg
Length: 1.2 m
Barrel: 355 mm
Sights: optical and night sights, as required
Muzzle velocity: subsonic, 320 m/s; ball, 760 m/s
Effective range: subsonic, 200 m; ball, 400 m

Manufacturer

Law Enforcement International Limited, PO Box 328, St Albans, Hertfordshire AL4 0WA.

Status

In production.

Service

In service with various countries.

UPDATED

LEI 7.62 mm TRG-SPP suppressed sniper rifle

Description

The LEI 7.62 mm TRG-SPP suppressed sniper rifle is a Law Enforcement International Ltd (LEI) variant of the Finnish Sako TRG rifle modified for the fully suppressed weapon role. The Sako TRG 22 bolt action and stock are retained while the stainless steel, match grade heavy barrel is modified to be surrounded by a stainless steel and chromium suppressor. Using the suppressor with subsonic ammunition, the firing signature is virtually inaudible, and the muzzle flash is eliminated. The suppressor can be quickly removed, without tools, for maintenance or stowage.

The TRG-SPP can fire both standard Ball and subsonic ammunition. Although chambered for 7.62 × 51 mm NATO ammunition, the rifle is also available chambered for 0.243 Winchester.

LEI 7.62 mm TRG-SPP suppressed sniper rifle

No iron sights are supplied, as there are quick-detach precision mounts for 1-inch, 26 mm or 30 mm diameter scopes. The stock is aluminium-reinforced composite and is fully adjustable to suit individual preferences. The two-stage trigger is also fully adjustable. The stock colour can be black, NATO green, arctic white or desert sand.

Specifications
Cartridge: 7.62 × 51 mm NATO or 0.243 Winchester
Operation: bolt-action, single-shot
Locking: 3 locking lugs
Feed: 10-round box magazine
Weight: without sights, 4.7 kg
Length: 1.23 m
Barrel: 370 mm
Sights: as required
Muzzle velocity: subsonic, 320 m/s; Ball, 800 m/s
Suppression: 43 dB

Manufacturer
Law Enforcement International Ltd, PO Box 328, St Albans, Hertfordshire AL4 0WA.

Status
Available.

NEW ENTRY

UNITED STATES OF AMERICA

Objective Sniper Weapon (OSW)

Development
The US Army's Objective Sniper Weapon (OSW) programme has as its objective the development of a single lightweight (under 5.9 kg), long-range (2,000 m) sniper weapon which will provide high probabilities (greater than 50 per cent) of incapacitation throughout its effective range. The OSW is part of the overall US Joint Service Small Arms Master Plan (JSSAMP).

The goals of the OSW programme were developed by JSSAMP over two years (1993-94) at conferences involving both users and industry. By 1996, the programme had reached the stage of determining the state of the art in several applicable technical areas, including bullet guidance and crosswind sensing. The programme was actually initiated in late 1996 and will undergo a two to three year technical exploration and analysis activity. Demonstration weapons are expected to be ready during Fiscal Year 2002.

Specifications
Tentative
Weight: no more than 5.9 kg; 4.5 kg desired
Probability of hit: 1.0 at 1,000 m required against personnel; 1,200 m desired
Initial operational capability: 2,010

Status
Early stages of development.

UPDATED

US Marine Corps 7.62 mm Designated Marksman Rifle (DMR)

Development
The 7.62 mm Designated Marksman Rifle (DMR) is intended to provide the spotter member of US Marine Corps sniper teams with a precision semi-automatic rifle. It should be capable of nearly the same level of accuracy as the standard sniper rifle, while providing the capability to rapidly engage multiple targets with greater effectiveness and at longer ranges than possible with the current spotter rifle. The rifle will also allow both members of the sniper team to carry the same calibre of ammunition, as the spotter is currently armed with the 5.56 mm M16A2 rifle. Rather than purchase off-the-shelf commercial rifles, a decision was taken to manufacture the DMR using M14 rifles from existing stocks and converting them to DMR standard. The DMR is currently in production at the US Marine Corps Rifle Team Equipment Shops at Quantico, Virginia.

Description
For the DMR an existing M14 rifle is stripped, the barrel is removed and all components that allow selective fire are either removed entirely or are welded to ensure that the rifle is capable of semi-automatic fire only. The barrel is replaced with a Kreiger barrel contoured to Marine Corps specifications. The military stock is replaced by a McMillan M2A stock with spacers for length of pull adjustment and an adjustable cheekpiece; screw fittings for the latter are such that they may be adjusted for ambidextrous use. A McMillan bipod is standard. The stock ferrule at the front tip of the stock is glass bedded and opened to match specifications.

The receiver is equipped with a rear lug and then 'Marine-Tex' bedded to the stock and the barrel band is welded to the gas system. The flash suppressor is opened to match specifications for enhanced accuracy. The flash suppressor may be unscrewed and replaced by a sound suppressor manufactured by OPS Inc. Gas pistons are specially selected and fitted.

Open sights are standard aperture rather than match type. The Marine Corps uses a Brookfield Precision one-piece steel mount welded to the receiver to mount the telescopic sight. The DMR is also used by US Navy units and by selected Marine Corps units in addition to scout-sniper platoons. Navy rifles will use Leupold Mark 4 M1 sights while the Marine Corps security units will initially have Leupold Mark 3 × 10 scopes. All rifles are equipped with a leather sling.

US Marine Corps DMR rifles have to be able to fire 5- or 10-round groups with 76.2 mm at 274 m (300 yards).

Specifications
Cartridge: 7.62 × 51 mm
Operation: gas, semi-automatic
Locking: rotating bolt
Feed: 20-round detachable box magazine
Weight: 5 kg
Length: 1.112 m
Barrel: 559 mm
Rifling: 5 grooves, rh, 1 turn in 305 mm
Sights: open, fore, protected blade; open, rear, aperture, adjustable for windage and elevation; optical – see text

Manufacturer
US Marine Corps Rifle Team Equipment Shop, US Marine Corps Weapons Training Battalion, US Marine Corps Combat Developments Command, Quantico, Virginia 22134.

Status
In production.

Service
US Navy and Marine Corps.

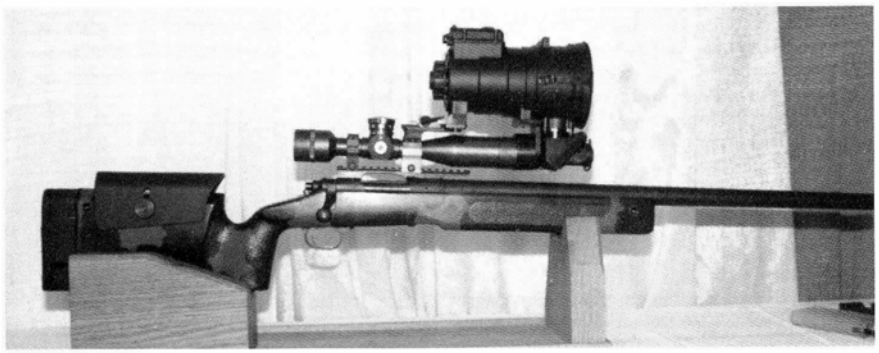
7.62 mm Designated Marksman Rifle (DMR) (C Cutshaw) 0063239

VERIFIED

7.62 mm M40A1 (PIP) sniper rifle

Development
The 7.62 mm M40A1 Product Improved (PIP) sniper rifle was originally to have been known as the M40A2. Using the M40A1 as the starting point, every aspect of the original rifle was evaluated to determine if improvement was desirable or necessary. The resultant M40A1 PIP emerged as a completely different rifle.

Description
The M40A1 PIP uses a Remington 700 bolt action as a starting point. The receiver is then fitted with a fluted Hart, Douglas or Obermeyer precision barrel by armourers at the US Marine Corps Weapons Training



7.62 mm M40A1 PIP sniper rifle (C Cutshaw) 0063245

Virginia. Barrels are threaded to accept sound suppressors. The M40A1 PIP is built using McMillan stocks with quick-detachable swivels, spacers for length of pull adjustment, and an adjustable cheekpiece. The pistol grip and forestock are knurled to provide a non-slip grip. The receiver is titanium bedded to the receiver without use of pillars. The trigger guard is a one-piece DD Ross. All metal surfaces are finished using Roblar Teflon or Birdsong's Black T in green.

The telescopic sight is a fixed × 10 Unertl unit made specifically for the US Marine Corps and is not available commercially. The sight unit is mated to a MIL-STD-1913 rail mount.

Specifications
Cartridge: 7.62 × 51 mm NATO
Operation: manual bolt action, single shot
Feed: 5-round box magazine
Weight: 6.1 kg
Length: 1.117 m
Barrel: 610 mm
Rifling: rh, 1 turn in 254 mm
Sight: telescope, Unertl Special Sniper, × 10
Muzzle velocity: 777 m/s
Effective range: 1,000 m

Manufacturer
US Marine Corps Rifle Team Equipment Shop, Weapons Training Battalion, US Marine Corps Combat Development Command, Quantico, Virginia 22134.

Status
In production.

Service
US Marine Corps.

UPDATED

7.62 mm M40A1 sniper rifle

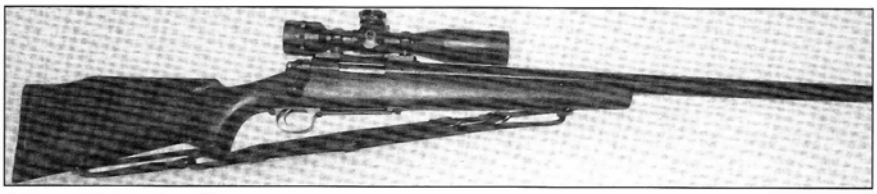
Description
The 7.62 mm M40A1 sniper rifle was adopted in the early 1970s to meet the needs of the US Marine Corps for a long range sniper rifle. Each rifle is individually produced by the Marine Corps' Rifle Team Equipment (RTE) Shop located at Quantico Marine Corps Base, Virginia.

The M40A1 is based on the Remington 700 bolt action. Model 700 receivers are purchased by the Marine Corps and shipped to the RTE Shop at Quantico where they are built into M40A1 sniper rifles. The Remington receivers are fitted with a specially made precision barrel optimised for accuracy with match grade ammunition. Barrels are purchased either from Hart, Atkinson, or H-S Precision. The barrelled actions are then tightly bedded in glass fibre into special McMillan (Harris Gunworks Inc) polymer stocks with the barrel floating free along its entire length. The trigger group utilises a modified Winchester Model 70 trigger housing and mechanism.

In service, Marine snipers typically employ M118 7.62 mm Special Ball ammunition or Federal 7.62 mm match ammunition.

The M40A1 is equipped with a specially made Unertl × 10 fixed focus telescope. It has no iron sights. The rifle has a fixed five-round magazine.

A modification programme is being conducted by the US Marine Corps to improve the M40A1 – see the following entry.



7.62 mm M40A1 sniper rifle

Specifications
Cartridge: 7.62 × 51 mm NATO
Operation: manual bolt action, single shot
Feed: 5-round (4 + 1) integral box magazine
Weight: 6.59 kg
Length: 1.117 m
Barrel: 610 mm
Rifling: rh, 1 turn in 254 mm
Sight: telescope, Unertl Special Sniper, × 10
Muzzle velocity: 777 m/s
Effective range: 1,000 m

Manufacturer
US Marine Corps Rifle Team Equipment Shop, US Marine Corps Combat Development Command, Quantico, Virginia 22134.

Status
In production.

Service
US Marine Corps.

VERIFIED

Arms Tech 0.300 Winchester Magnum Super Match Interdiction rifle

Development
The Arms Tech Super Match Interdiction rifle was developed as a private venture by Arms Tech. It was to fill a need for a precision rifle as accurate as a bolt-action rifle, able to reach targets beyond the range of standard 7.62 × 51 mm weapons, and providing a quick follow-up shot capability, for tactical situations requiring the engagement of multiple targets.

Arms Tech 0.300 Winchester Magnum Super Match Interdiction rifle 0008607

Description
The Super Match Interdiction rifle is based on an extensively modified FN HERSTAL BAR semi-automatic sporting rifle. Stainless steel barrels are by either Douglas or Schneider, are fully free floated for accuracy and are blackened by a chrome sulphide process. Barrels are cryogenically treated to enhance accuracy and extend service life. The barrels are threaded to accept a sound suppressor. In the absence of a suppressor, a cap is screwed onto the muzzle to prevent damage.

Extraction has been improved for strength and reliability. For cold weather operations, the charging handle has been extended. Locking lug recesses, integral to the barrel in standard rifles, have been replaced by a proprietary carbon steel shank to improve reliability and strength. The bolt is lapped for smooth operation. The magazine release has been changed to one similar to a Kalashnikov type. Stocks are by McMillan (Harris Gun Works) and each action is custom-bedded using a powdered metal-filled epoxy compound.

The rifle incorporates an Arms Tech proprietary telescope mounting system that allows optics to be removed and replaced without loss of zero. The Super Match Rifle is warranted by the manufacturer to shoot with sub-minute of angle accuracy over its effective range.

Specifications
Cartridge: 0.300 Winchester Magnum
Operation: gas, semi-automatic
Locking: rotating bolt
Feed: 3- or 10-round detachable box magazine
Weight: empty, 6.3 kg
Length: 1.193 m
Barrel: 660 mm
Rifling: 6 grooves, rh, 1 turn in 304 mm
Sights: optical, to customer specifications
Muzzle velocity: 971 m/s
Rate of fire: 3-4 rds/min
Effective range: 1,000 m

Manufacturer
Arms Tech Limited, 5133 North Central, Phoenix, Arizona.

Status
In production.

Service
Unspecified special operations forces.

VERIFIED

Arnold Arms special purpose rifles

Description
The Arnold Arms Marks I and II Neutralizer rifles are designed to achieve the highest standard of military and police accuracy. Mark I rifles are built using Remington or Winchester receivers with chrome molybdenum and stainless steel match grade barrels manufactured by either Douglas, Hart, Kreiger, Lilja or Shilen. Barrels are fully free floating. Remington actions are optimised, accurised, equipped with a three-position safety and the bolt is fitted with a Sako extractor. A detachable box magazine is installed as standard equipment. Triggers are manufactured by Jewell, Shilen, Remington or Timney.

Mark II rifles are manufactured using Arnold Arms' proprietary Apollo action. The Apollo bolt is machined from a solid block of E-4340 chrome-molybdenum steel. Machining is accomplished using the Electric Discharge Machining (EDM) process which leaves no tool marks, holds closer tolerances than conventional methods, and places no stress of the metal. The

E4340 chrome-molybdenum steel hardened to Rockwell C-38. The action is available in short, long and magnum size lengths to accommodate virtually any cartridge. The lower receiver is 7075-T6 aluminium.

Neutralizer glass fibre stocks are manufactured by McMillan and are adjustable for length of pull and cheek height. Finish is either black or various camouflage finishes, including desert, woodland and arctic.

All Arnold Arms Neutralizer rifles are guaranteed to shoot under 0.5 minute of angle (MOA).

Specifications

Cartridge: 5.56 × 45 mm; 7.62 × 51 mm; 0.300 Winchester Magnum
Operation: manual, bolt action
Locking: rotating bolt
Feed: detachable box magazine
Weight: 3.6 to 8.1 kg, depending on model and configuration
Length: depending on model and configuration
Barrel: 508-660 mm, depending on model
Sights: to customer specifications; rifles are configured for standard optical mounts

Manufacturer

Arnold Arms Inc, PO Box 1011, Arlington, Washington 98233.

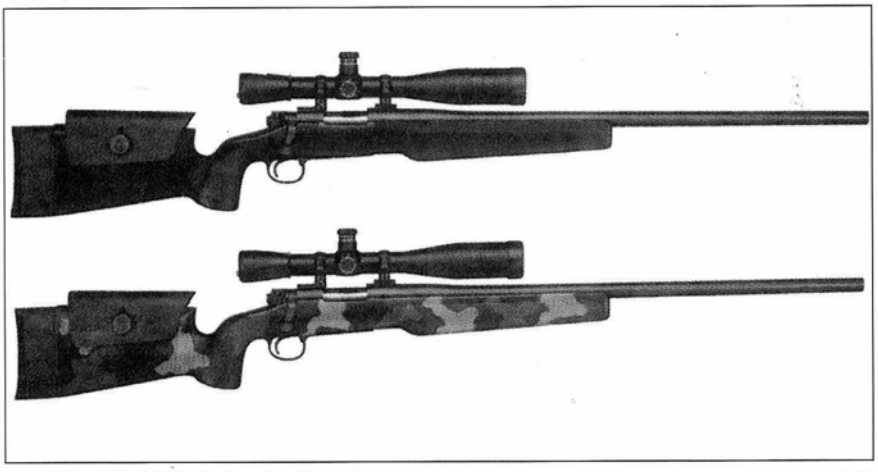
Status

In production.

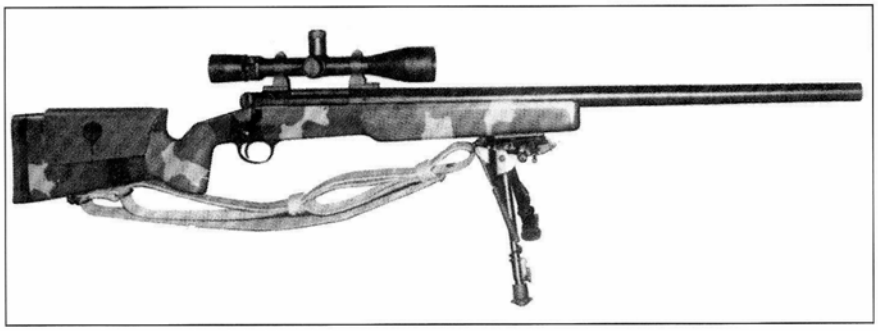
Service

Israel, various US Federal and local law enforcement agencies.

VERIFIED



Arnold Arms Mark 1 Neutralizer rifles (Arnold Arms) 0063241



Arnold Arms Mark II Neutralizer rifle (Arnold Arms) 0063242

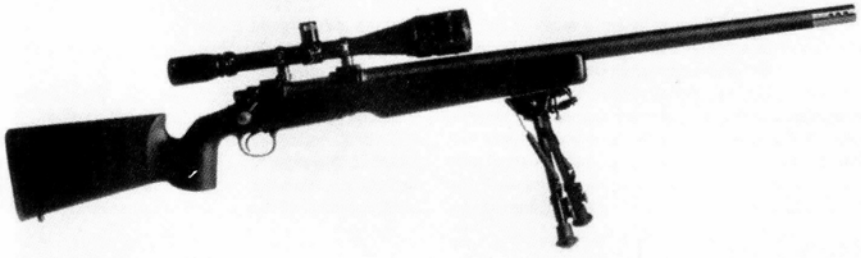
Christensen Arms Carbon tactical sniper rifle

Development

The Carbon tactical sniper rifle was developed as a private venture by Christensen Arms for use by military and police snipers.

Description

Current production versions of the Carbon tactical rifle are available in all standard chamberings for sniper use. The rifles are manufactured using modified Remington 700 short actions with lightweight Pacific Research synthetic stocks, although Christensen will provide stocks from any supplier specified by the customer. Actions are hand-lapped, trued, faced and set at minimum head space for maximum accuracy. Actions are glass bedded along their entire length. The key feature of the Carbon tactical rifle is its barrel. This incorporates a Shilen precision rifled match liner with a high-strength graphite/epoxy sleeve permanently applied over it to form a homogeneous unit of great strength, rigidity and extremely light weight. The composite barrel is not only far stronger and lighter than unitary barrels of solid steel, it also disperses heat better. Standard trigger is a Shilen Precision Match set to 0.6 kg pull, but the trigger weight is adjustable and the manufacturer will install triggers to customer specification. The Christensen Carbon Tactical Rifle is warranted to shoot 0.5 MOA at 100 m upon delivery to the customer.



Christensen Arms Carbon tactical sniper rifle 0008609

Specifications

7.62 × 51 mm
Cartridge: 7.62 × 51 mm
Operation: manual bolt
Feed: 4-round box magazine
Weight: 2.7 kg
Length: 1 m
Barrel: 660 mm
Rifling: 6 grooves, 1 turn in 254 mm
Sights: optical, to customer specification

Manufacturer

Christensen Arms Inc, 385 North 3050 East, St George, Utah 84630.

Status

Available.

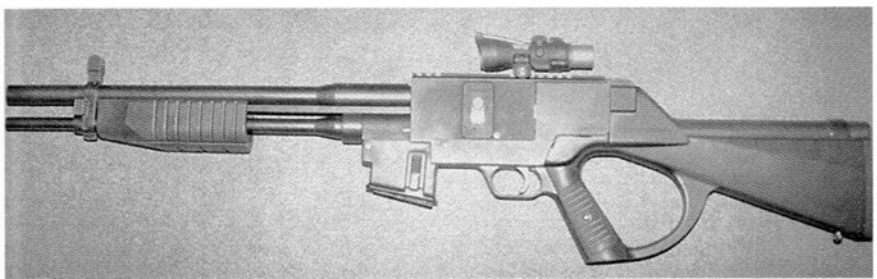
VERIFIED

Crossfire MK-1 slide action rifle/shotgun

Development

The Crossfire MK-1 slide action rifle/shotgun is a combination of a 5.56 mm rifle and a 12-gauge shotgun. It is adaptable to low-intensity conflict, peacekeeping and law enforcement operations where a full spectrum of force capability is required, ranging from non-lethal or close-quarter battle at ranges of 25 m or less, to longer-range engagements of up to 500 m.

The Crossfire MK-1 is manufactured under contract for Crossfire by General Dynamics Weapon Systems. Military marketing and police sales outside the USA are General Dynamics' responsibility, while worldwide commercial and law enforcement sales within the USA are the responsibility of Crossfire.



Crossfire MK-1 slide action rifle/shotgun with five-round magazine
(T J Gander)
0055877

Description

The rifle portion of the Crossfire MK-1 is fed from a standard AR-15/M16 magazine or a five-round AR-15 type magazine. The shotgun is fed from a four-round detachable tubular magazine that forms the comb of the butt-stock. The two firearms share a single receiver and trigger mechanism together with the operating slide. The rifle or shotgun can be selected by moving a three-position switch on the left-hand side of the

receiver. The top position selects the shotgun, the centre position is safe, while the lowest position selects the rifle. The two firearms cannot be operated by a single pull of the trigger.

The rifle will operate with any 5.56 × 45 mm cartridge, including M193 and SS109, while the shotgun accommodates all shotgun cartridges up to 76 mm (3 in Magnum). The shotgun barrel incorporates Invector screw-in choke tubes. Both barrels are cold hammer forged.

The Crossfire MK-1 is available in either a camouflage or black oxide finish. Open sights are provided as standard with various optical sights being optional. Manufacture is to ISO 9001 quality standards.

Specifications

Shotgun figures in parentheses
Cartridge: 5.56 × 45 mm (12 gauge, 76 mm)
Operation: manual, slide action
Feed: detachable box magazine, 5 to 30 rounds (detachable tubular magazine, 4 + 1 capacity)
Weight: 3.9 kg
Length: 965 mm
Barrel: 508 mm
Rifling: 6 grooves, rh, 1 turn in 229 mm (none, screw-in choke tubes)
Sights: rear, aperture, adjustable for windage and elevation; front, protected post, adjustable for elevation; optical, to customer specification

Manufacturer

Crossfire, 2169 Greenville Road, LaGrange, Georgia 30241.

Status

In production. Available.

Service

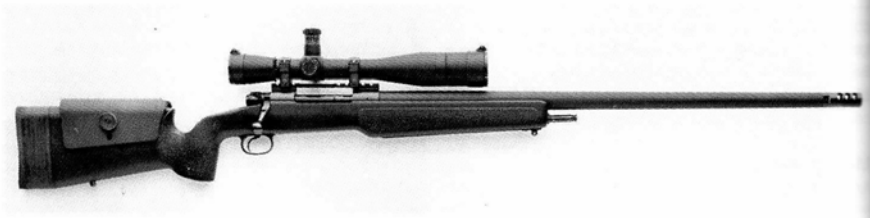
Undergoing evaluation by US and several overseas military forces. Understood to have been procured by a nation in the Persian Gulf region.

VERIFIED

Dakota Arms 0.338 Lapua Magnum T-76 Longbow tactical engagement rifle

Development

The T-76 was initially developed to the requirement of a foreign military customer who subsequently cancelled the order. Dakota Arms then proceeded with development as a private venture and the rifle is now in production.



Dakota Arms 0.338 Lapua Magnum T-76 Longbow tactical engagement rifle 0008610

Description

The Dakota Arms T-76 is a conventional bolt action, but unlike many current tactical rifles which use actions built by other manufacturers, Dakota Arms produces its own receivers. The receiver is machined from solid bar stock, as is the bolt. A Picatinny Rail is incorporated into the receiver for standard optical mounts.

Dakota Arms also manufactures most of the other major components of the T-76, including the claw-type extractor which allows controlled cartridge feeding. The T-76 features a square-bottom action and blind magazine for additional strength and accuracy. Actions are available either right- or left-handed.

The button-rifled, hand-lapped T-76 barrel is manufactured by H-S Precision using LW-50 stainless steel, and incorporates a built-in muzzle brake for recoil reduction. The stock is a reinforced glass fibre McMillan (Harris Gun Works) A2 type, is ambidextrous and may be specified in either black or olive drab. The action is bedded along its full length within the stock. Length of pull is adjustable over 38 mm of travel. The adjustable trigger is a Winchester Model 70 type, set at the factory at 1.1 kg pull.

The T-76 is warranted by the manufacturer to be accurate within 0.5 MOA at 100 m.

In addition to 0.338 Lapua Magnum, the T-76 is also available in two proprietary calibres, 0.300 Dakota Magnum and 0.330 Dakota Magnum.

Specifications

Cartridge: 0.338 Lapua Magnum; 0.300 Dakota Magnum; 0.330 Dakota Magnum
Operation: manual bolt
Feed: blind box magazine
Weight: 6.2 kg
Length: nominal, 1.295 m
Barrel: 711 mm
Rifling: 6 grooves, 1 turn in 254 mm
Sights: optical, to customer specification
Effective range: 1,500 m

Manufacturer

Dakota Arms Inc, 1310 Industry Road, Sturgis, South Dakota.

Status

In production.

Service

Under evaluation by several military and police organisations.

VERIFIED

Ed Brown Model 702 Tactical sniper rifles

Description

Ed Brown Model 702 Tactical sniper rifles are built on Brown's proprietary bolt action machined from heat-treated solid bar stock to ensure optimum straightness and concentricity. The rear receiver bridge is precision-ground to ensure optimum alignment with telescopic sight mounts. All rifle components are made in-house rather than buying actions and/or barrels from outside suppliers.

The bolt-mounted safety has three positions. The safety positively locks the bolt, firing pin and trigger when place in the rearmost 'Safe' position. In the intermediate position the firing pin and trigger are locked but the bolt can be manipulated to clear or load the rifle safely.

The Model 702 trigger is tuned to break at 2.25 kg. The fibreglass stock is made for Brown by McMillan and is coated with black epoxy unless the customer specifies another colour. Options include a stainless steel barrel, a different barrel contour, special calibres, and telescopic sight mounted and boresighted. The rifle is guaranteed to shoot within 1 to 1.2 minutes of angle depending on the inherent accuracy of the ammunition used. Both heavy and light models are available.

Specifications

Model 702 Heavy Tactical version
Cartridge: 7.62 × 51 mm; 0.300 Winchester Magnum
Operation: manual, rotating bolt action
Feed: 5-round internal box magazine
Weight: without sight, 5.2 kg
Length: ca 1.143 m
Barrel: 660 mm
Sights: optical, none provided; MIL-STD-1913 rail installed

Manufacturer

Ed Brown Products, 43825 Muldrow Trail, Perry, Missouri 63462.

Status

In production. Available.

UPDATED

Ed Brown Model 702 Tactical sniper rifle 0084674

H-S Precision Pro Series 2000 LA and SA tactical rifles

Development

H-S Precision has for many years been a supplier of precision rifle components for other manufacturers and is now undertaking the manufacture of a proprietary precision rifle for military and police forces. The Pro Series 2000 is available in two receiver lengths, one for short cartridges, such as the 7.62 × 51 mm, and the other for cartridges such as the 0.300 Winchester Magnum. Rifles are available to user specification in all standard chamberings. A take-down version is also available, as are versions for sporting use.

Description

The Pro Series 2000 rifle is of stainless steel construction with a cut-rifled barrel, cone bolt, titanium firing pin, claw extractor and three-position safety. The stock is H-S Pro Series with the company's proprietary bedding system. All metal is finished in matt blue, with Teflon finish optional.

The Pro Series 2000 is guaranteed by the manufacturer to achieve 0.5 MOA accuracy at 100 m in all calibres up to 7.62 mm.

Specifications

Pro Series 2000 SA 7.62 × 51 mm
Cartridge: 7.62 × 51 mm
Operation: manual, bolt action
Locking: rotating bolt
Feed: 5- or 10-round detachable box magazine
Weight: 6.1 kg
Length: 1 m
Barrel: 609 mm
Rifling: cut-rifled, 6 grooves, 1 turn in 254 mm
Sights: optical, to user specification

Manufacturer

H-S Precision Inc, 1301 Turbine Drive, Rapid City, South Dakota 57701.

Status

Available.

VERIFIED

H-S Precision Pro Series 2000 Tactical Take Down rifles

Description

For its Pro Series 2000 Tactical Take Down (TTD) rifle, H-S Precision has developed a patented lock-up and adjustment system that compensates for wear of action and threads, thereby ensuring consistently tight assembly and accuracy. This system permits changing calibres between cartridges with case heads of the same size. As an example, the Pro Series 2000 Long-Range Rifle is available in 7.62 × 51 mm/0.300 Winchester Magnum; this rifle is the version most preferred by US military and police snipers. All H-S Precision rifles are available in either right- or left-hand versions.

Specifications

Cartridge: 7.62 × 51 mm/0.300 Winchester Magnum
Operation: manual, bolt action
Locking: rotating bolt
Feed: 5- or 10-round detachable box magazine
Weight: 6.1 kg
Barrel: 597 mm
Sights: none provided; standard Weaver rail accepts most optical mounting hardware

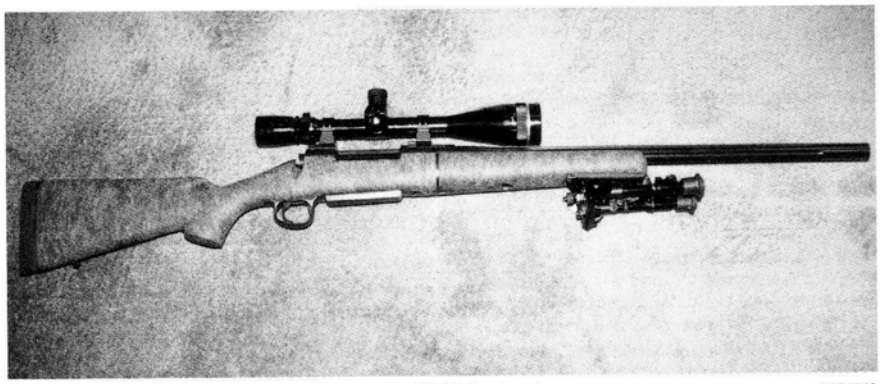
Manufacturer

H-S Precision Inc, 1301 Turbine Drive, Rapid City, South Dakota 57701.

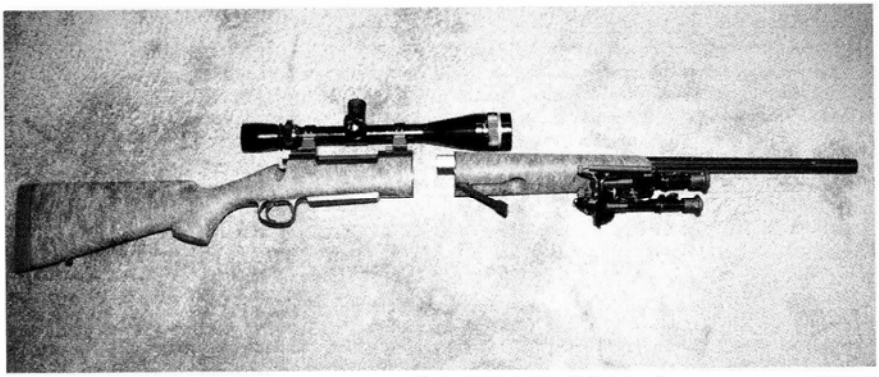
Status

In production. Available.

VERIFIED



H-S Precision Pro Series 2000 Tactical Take Down rifle (C Cutshaw) 0054749



H-S Precision Pro Series 2000 Tactical Take Down rifle in divided state (C Cutshaw) 0063244

H-S Precision Pro Series rifles

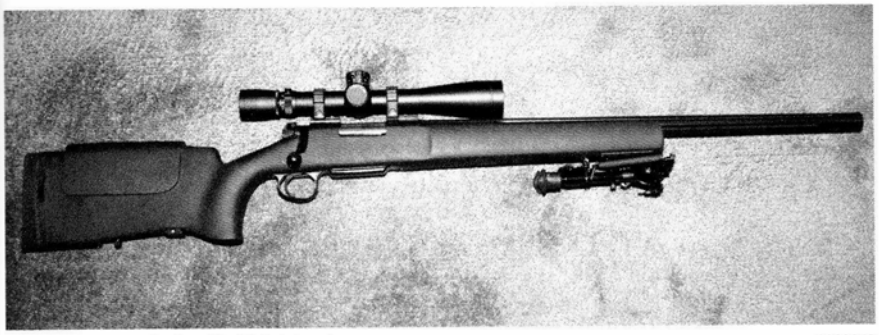
Description

H-S Precision Pro Series manual bolt action rifles are manufactured using Remington action and H-S Precision's proprietary barrels and stocks. The stocks are made of Kevlar, carbon fibre, glass fibre and glass fibre-reinforced structural polyurethane foam, and have a full-length aluminium bedding block in fixed stock models; takedown models use integral bedding blocks.

H-S Precision cut rifling barrels are used in all rifles in either match grade or 10X Match Grade stainless steel. The latter barrels are designed to reduce gas leakage, bullet upset and metal fouling. Each rifle has the action face trued, recoil lungs lapped, and the bolt checked for concentricity and face squareness. All H-S Precision rifles up to 7.62 mm are guaranteed to shoot under 0.5 Minute of Angle (MOA). Larger calibres are guaranteed to shoot 1 MOA.

For its Pro Series takedown rifles, H-S Precision has developed a patented lock-up and adjustment system that compensates for action and thread wear to ensure consistent tight assembly and accuracy. The system also allows changing calibres between cartridges whose case heads are the same. As an example, the Pro Series Long-Range Rifle is available in a 7.62 × 51 mm/0.300 Winchester Magnum combination. This rifle is the version most preferred by US military and police snipers.

All H-S Precision rifles are available in either right- or left-hand versions.



H-S Precision Pro Series rifle (C Cutshaw) 0063243

Manufacturer

H-S Precision Inc, 1301 Turbine Drive, Rapid City, South Dakota 57701.

Status

In production. Available.

VERIFIED

Iron Brigade Armoury 7.62 mm Tactical Precision Rifle

Description

The Iron Brigade Armoury 7.62 mm Tactical Precision Rifle is intended for those agencies which cannot afford the top-of-the-line M40 Series but who still require a precision tactical rifle of extreme accuracy. The Tactical Precision Rifle incorporates a Remington Model 700 heavy barrelled action and a H-S Precision stock with an aluminium block. A Leupold Tactical Model x4.5-14 telescopic sight is fitted using Iron Brigade's proprietary one-piece mount.

The rifle is rebuilt to Iron Brigade specifications. This includes ensuring the barrel is completely free-floating along its entire length and that the bolt handle properly clears the stock channel. The muzzle is recrowned and the trigger mechanism is rebuilt with the pull weight set to 1.7 kg. The action of the bolt is smoothed and the headspace verified. After rebuild, the rifled is zeroed at 100 m using Black Hills Match ammunition.

The rifle is fitted with a Harris Bench Rest Model bipod and a Turner black leather sling. A hard carrying case is provided.

Specifications
Cartridge: 7.62 × 51 mm
Operation: manual, rotating bolt action
Feed: 4-round internal box magazine
Weight: ca 6 kg
Length: ca 1.11 m
Barrel: 660 mm; other lengths available
Sights: Leupold x4.5-14

Manufacturer
Iron Brigade Armoury, 100 Radcliffe Circle, Jacksonville, North Carolina 28546.

Status
In production. Available.

VERIFIED

Iron Brigade Armoury 7.62 mm Tactical Precision Rifle
0093169

Iron Brigade Armoury M40 Series sniper rifles

Description
Iron Brigade Armoury's Chandler sniper rifles are patterned after the US Marine Corps M40 series sniper rifles but are designed and manufactured to exceed Marine Corps specifications. Chandler M40 Series rifles are guaranteed to achieve 1 minute of angle accuracy to a range of 100 yards/914 m, so every shot will fall within a 254 mm circle at that range.

The rifles are built using Remington 700 actions with McMillan stocks, Hart barrels, Leupold military specification telescopic sights with Marine Corps Mil-Dot reticles, Iron Brigade's proprietary sight mount and a one-piece trigger guard. Each rifle is hand-fitted with the bolt squared and aligned to the barrel. The box magazine is welded to the action for durability and the follower and magazine are modified for a five-round capacity. The bolt mainspring is replaced with a Wolfe special spring. The standard Remington trigger mechanism is retained but is rebuilt and tuned for a 1.7 kg trigger pull. Trigger adjustment screws are sealed to prevent loosening under routine use and recoil. The tapered Hart barrel is made of 416R stainless steel. The McMillan epoxy resin stock is available in a variety of styles, including US Marine Corps M40A1 and M40A2 types, or to user specifications.

Iron Brigade Armoury 7.62 mm M40 Series sniper rifle 0093168

Specifications
Cartridge: 7.62 × 51 mm; 0.300 Winchester Magnum; 0.30-06; 7.61 S&H, 5.56 × 45 mm
Operation: manual, rotating bolt action
Feed: 5-round internal box magazine
Weight: ca 6.5 kg
Length: ca 1.115 m
Barrel: 660 mm; other lengths available
Sights: Leupold military specification

Manufacturer
Iron Brigade Armoury, 100 Radcliffe Circle, Jacksonville, North Carolina 28546.

Status
In production. Available.

Service
Special military and law enforcement organisations worldwide.

VERIFIED

Leitner-Wise LW 15.449™ specialist rifle

Development
The Leitner-Wise LW 15.449™ rifle is not easy to categorise as, despite its powerful 12.5 × 40 mm cartridge, it is definitely not an anti-matériel rifle. It was developed primarily for used by special forces and paramilitary or police organisations who require a door or barrier breaching weapon. In addition, it is a highly effective anti-personnel weapon, even against targets protected by body armour. A bullet strike will probably not penetrate body armour but the traumatic shock imparted by the bullet will be more than sufficient to disable.

The standard 12.5 × 40 mm cartridge fires a jacketed lead bullet with an open hollow point to enable the bullet point to spread on impact. The bullet weighs 20 g and has a muzzle velocity of about 488 m/s. Overall length of a complete cartridge is 51 mm. The brass cartridge case has a slight taper to assist extraction.

Loaded ammunition can be supplied or as separate reloading components, including dies. In addition to the standard ammunition the rifle can deliver less than lethal loads.

Description
The Leitner-Wise LW 15.449™ specialist rifle is basically an AR-15/M16 series rifle with a new upper receiver assembly and a new barrel. The upper receiver is forged, hard anodised aluminium. The upper assembly can be fitted to existing AR-15/M16 rifles and can be provided with a MIL-STD-1913 rail assembly or some other form of mounting system for optical sights. Firing is semi-automatic, utilising the existing rotary bolt locking and gas system, but involving a new bolt

If required, standard AR-15/M16 iron sights may be utilised. A round two piece or fully-floating front hand guard can be provided. If required the front hand guard can feature mounting rails onto which various combat accessories can be mounted. One unusual accessory is a forward hand grip that doubles as a CS riot control agent dispenser.

Rounds are fed from a seven-round box magazine, although a 14-round magazine is available.

Leitner-Wise LW 15.449™ rifle with CS riot agent dispenser in forward grip (T J Gander) ***NEW***/0132877

Specifications
Cartridge: 12.5 × 40 mm
Operation: gas, semi-automatic
Locking: rotary bolt
Feed: 7- or 14-round box magazine
Barrel: 419 mm
Rifling: 6 grooves, rh, 1 turn in 355 mm
Sights: to customer specification
Muzzle velocity: ca 488 m/s

Manufacturer
Leitner-Wise Rifle Co, 1033 North Fairfax Street, Alexandria, Virginia 22314.

Status
Available.

NEW ENTRY

RAD M91 and M91A2 sniper rifles

Development

The RAD M91 7.62 mm sniper rifle was developed by Redick Arms Development (RAD) in co-operation with the US Navy to meet the requirements of US Naval Special Warfare units. It has been procured by the US Navy for SEAL teams and some other US special operations units.

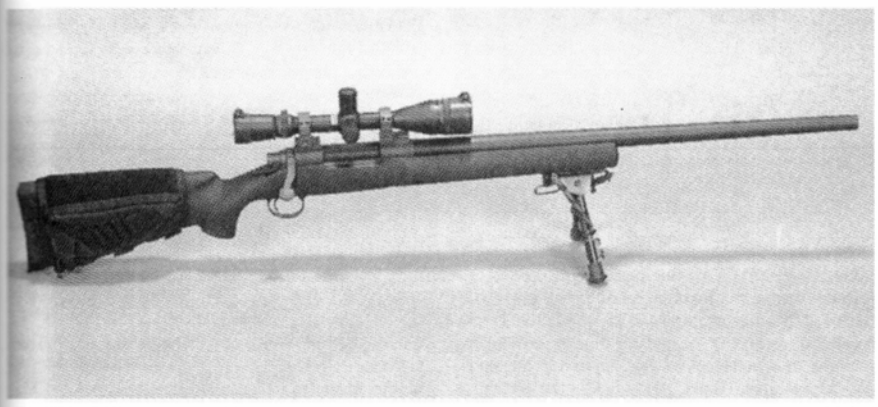
Description

The RAD M91 7.62 mm sniper rifle is a conventional bolt action rifle based around a Remington 700 bolt action allied with a match grade 416R stainless steel cut rifled barrel with a recessed crown. The trigger is also a Remington 700 component reconfigured to meet US Navy specifications with a 1.4 kg pull. Total ammunition capacity is five rounds, four in the box magazine and one in the chamber.

The stock is formed from Kevlar and glass fibre with a black finish. Finish overall is corrosion resistant and meets MIL-STD-171-1.

The standard optical sight is manufactured by Bausch and Lomb and is mounted on the rifle using proprietary ring mounts manufactured by Redick. Options include a left-hand action, Leupold telescopic sights and McMillan A-2 stocks.

The M91 is guaranteed by the manufacturer to shoot within 0.5 Minute Of Angle (MOA) – approximately 12.7 mm at 100 m.



RAD M91 7.62 mm sniper rifle 0037081

Variant

M91A2

The M91A2 rifle is intended to exceed the capabilities of the standard M91 both in distance and payload delivery. The M91A2 is chambered for the 0.300 Winchester Magnum cartridge. With proper ammunition, the M91A2 can achieve 0.5 MOA accuracy at 1,000 m and beyond. Specifications other than calibre are the same as the basic M91 except that the M91A2 weighs 7.26 kg.

Specifications

M91

Cartridge: 7.62 × 51 mm NATO; 0.300 Winchester Magnum; 0.30-06 (optional)
Operation: manual bolt
Feed: 4-round box magazine
Weight: 6.3 kg
Length: 1.143 m
Barrel: 610 mm
Rifling: 6 grooves, 1 turn in 254 mm
Sights: Bausch and Lomb Tactical 62-1040, MIL-Dot reticle

Manufacturer

Redick Arms Development, PO Box 2042, Rogers, Arkansas 72757.

Status

In production.

Service

US Navy special operations.

UPDATED

Remington 7.62 mm M24 Sniper Weapon System

Description

The Remington 7.62 mm M24 Sniper Weapon System was the US Army's first complete sniping system, replacing all other army sniper rifles. First issues, as a non-developmental item, took place in November 1988 and the system is issued to infantry battalions, special forces and Ranger units. It has been stated that the procurement objective was 2,510 systems. In October 2000, TACOM awarded a contract to Remington Arms for a further 100 M24 rifles. The contract was worth US$574,900.

The Rifle M24 was developed by Remington Arms, based upon their commercial M700 long bolt action and an M/40X custom trigger mechanism. The design was developed around the M118 special sniper ball cartridge, with the possibility of adapting to the 0.300 Winchester Magnum cartridge as a retrospective modification if required. The stock is of Kevlar reinforced glass fibre and is manufactured by H-S Precision, having a full length 7075T6 aluminium bedding block. The action is attached to the bedding block by two screws torqued to 65 in/lb.

The complete system consists of the six-shot bolt-action rifle, bipod, a laser-hardened day optical sight, iron sights, deployment kit, cleaning kit, hard rifle carrying case, telescope carrying case and total system carrying case. The complete system in its carrying case weighs 25.4 kg.

Remington manufactures the barrel specifically for the M24. It is cold hammer forged using 416R stainless steel and tapers from approximately 30.5 mm at the breech to 23 mm at the muzzle. Rifling is of the 5R type, angled at 110°, specifically for the M24 and its ammunition.

The telescopic sight is manufactured by Leupold & Stevens and is designated the M3A. The sight body is machined from a solid piece of 6061-T-6 aircraft aluminium. All lenses are treated with a proprietary anti-reflective coating that also enhances the light transmission. The MIL-Dot pattern reticle is etched into the lens as opposed to the commercial wire-type reticle.

The M24 Sniper Night Sight was added to the M24 Sniper Weapon System by late 1996. Also scheduled for addition was a flash and blast attenuation muzzle attachment, and a straight tripod-mounted telescope for surveillance and target acquisition. Some form of anti-reflection device (ARD) is under investigation for the M24's day optical sight.

Specifications

Cartridge: 7.62 × 51 mm M118 Special Ball
Operation: bolt action, single shot
Feed: 6-round integral magazine
Weight: rifle with sling, 5.49 kg; sight, 794 g; bipod, 318 g
Length: 1.092 m
Rifling: 5 grooves, rh, 1 turn in 285 mm
Sight: Leupold Ultra M3 × 10 telescopic
Muzzle velocity: ca 792 m/s
Max effective range: 800 m

Manufacturer

Remington Arms Company Inc, PO Box 179, Ilion, New York 13357-0179.

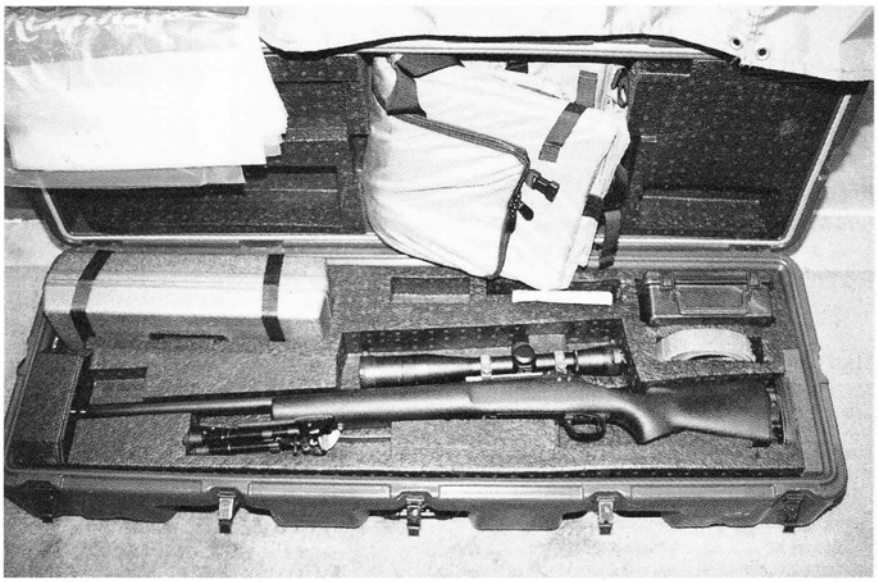
Status

In production.

Service

US Army, Egypt, Lebanon, South Africa and UAE.

VERIFIED



Remington 7.62 mm M24 sniper rifle in issue carrying case complete with accessories (C Cutshaw) 0037083

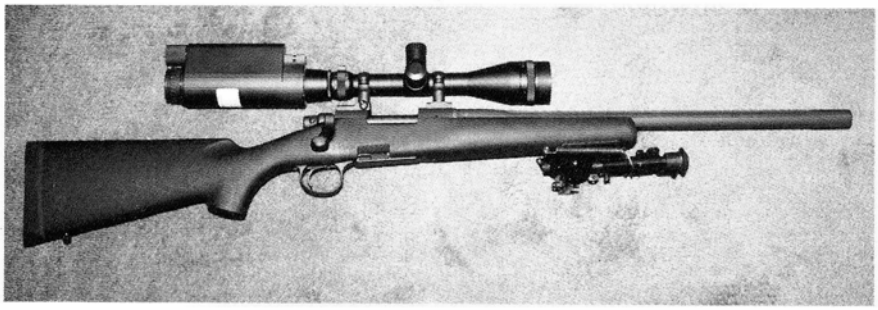
For details of the latest updates to *Jane's Infantry Weapons* online and to discover the additional information available exclusively to online subscribers please visit
jiw.janes.com

Remington Arms 7.62 mm M700P LTR sniper rifle

Description

The Remington Arms 7.62 mm M700P LTR (Light Tactical Rifle) has been developed for military and police use where a lightweight tactical rifle of superior accuracy but light weight is required. The rifle makes use of a Remington M700 short action and a carbon fibre reinforced glass fibre stock with aluminum block bedding. There are no iron sights, a Leupold × 4.5 to × 14 telescope sight being maintained on the rifle at all times. The detachable box magazine holds five rounds.

The M700P LTR is equipped as standard with a Generation III night vision optic clamped into place over the ocular lens of the telescopic sight, thus maintaining zero and making attachment or detachment of the night vision optic virtually instantaneous.



Remington 7.62 mm M700P LTR sniper rifle (C Cutshaw) 0037084

Specifications

Cartridge: 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 5-round detachable box magazine
Weight: with telescope, 4.6 kg
Length: ca 1.1 m
Barrel: 508 mm
Rifling: rh, 1 turn in 305 mm
Sights: Leupold × 4.5-14 telescope
Muzzle velocity: 777 m/s

Manufacturer

Remington Arms Company Inc, PO Box 179, Ilion, New York 13357-0179.

Status

In production.

VERIFIED

RND Manufacturing 0.338 Lapua Magnum RND 2000 precision rifle

Description

The RND Manufacturing 0.338 Lapua Magnum RND semi-automatic precision rifle is intended to bridge the gap between 7.62 × 51 mm rifles and 12.7 mm/0.50 Browning anti-matériel rifles. As with other RND manufactured rifles, the RND 2000 makes use of computer numerical controlled machined components and is constructed to a high degree of precision.

An integrated buffer system and a muzzle brake reduce the recoil. The gas operating system is similar to that of other RND rifles in that it incorporates a gas piston and rod that impinges against the bolt carrier to cycle the system. This operates against gases and fouling entering the receiver, as on other Stoner-type designs. The cocking handle of the RND 2000 is non-reciprocating and is located on the left side of the receiver. The butt-stock is fully adjustable for length and cheek rest height. An integral MIL-STD-1913 accessory is machined into the upper surface of the receiver. A carbon fibre barrel is available as an option.

The rifle is available in a number of finishes, including special colours and camouflage.

Specifications

Cartridge: 0.338 Lapua Magnum
Operation: gas, semi-automatic
Feed: 10-round detachable box magazine
Weight: standard barrel, 7.2 kg; carbon fibre barrel, 5.2 kg
Length: standard barrel, 1.003 m
Barrel: standard, 508 mm; lengths up to 660 mm available
Sights: optical (none provided)

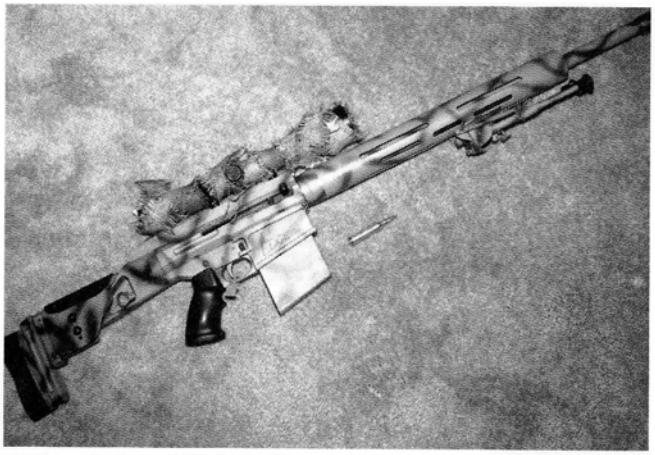
Manufacturer

RND Manufacturing Inc, 14311 Mead Street, Longmount, Colorado 80501.

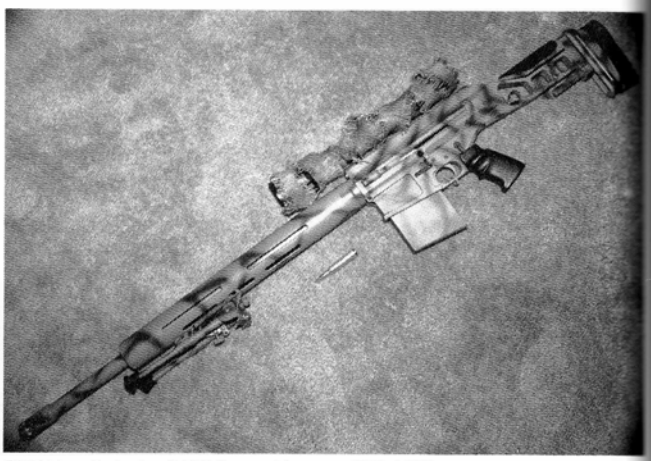
Status

In production. Available.

VERIFIED



RND Manufacturing 0.338 Lapua Magnum RDD 2000 precision rifle (C Cutshaw) 0093154



RND Manufacturing 0.338 Lapua Magnum RDD 2000 precision rifle (C Cutshaw) 0093155

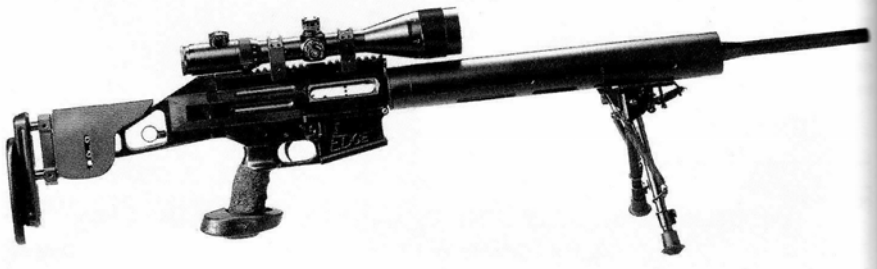
RND Manufacturing 7.62 mm RND 800 designated marksman rifle

Description

The RND Manufacturing 7.62 mm RND 800 designated marksman rifle is an advanced technology, semi-automatic precision rifle specifically designed and developed for use as a sniper rifle or for use by the spotter (designated marksman) member of a sniper team. Although RND rifles bear a superficial resemblance to Stoner-type rifles such as the AR-10, the operating system is different, eliminating the long-standing problem of carbon accumulation in Stoner-type rifles. The RND design also eliminates the recoil spring tube of the Stoner design.

The rifle is made of computer numerical controlled machined components. The upper and lower receivers are machined from solid blocks of aluminium, with the upper receiver machined in a hexagonal cross-section for added strength. Both upper and lower receivers are manufactured with lightening cuts for weight reduction. The barrel is fully free-floated and is available in various lengths from 508 to 660 mm. A carbon fibre barrel is available as an option.

No castings are used throughout the rifle. All components are hard black anodised with a Teflon coating. Custom finishes are available on request, as is a left-handed version.



RND Manufacturing 7.62 mm RND 800 designated marksman rifle

Specifications
Cartridge: 7.62 × 51 mm
Operation: gas, semi-automatic
Feed: 10- or 20-round detachable box magazine
Weight: standard barrel, 4.9 kg; carbon fibre barrel, 3.1 kg
Length: standard barrel, 952.5 mm
Barrel: standard, 508 mm; lengths up to 660 mm available
Sights: optical (none provided)

Manufacturer
RND Manufacturing Inc, 14311 Mead Street, Longmount, Colorado 80501.

Status
In production. Available.

VERIFIED

Ruger 7.62 mm M77 Mark II rifle

Description
The Ruger M77 Mark II rifle is described as a 'countersniper' rifle and is intended primarily for use by police and paramilitary units. It is an extremely well-made and well-finished weapon of 'classic' design, being a bolt-action repeater.

The bolt has dual opposed front locking lugs and a non-rotating Mauser type extractor which cocks on opening. The entire action is heat treated investment cast chrome-molybdenum steel with a matt blue finish. A two-stage target type trigger mechanism is provided, fully adjustable for let-off and sear engagement. The match grade free floating barrel is hammer forged stainless steel, while the one-piece stock is high quality laminated black American hardwood.

The standard calibre is 0.308 Winchester (7.62 × 51 mm), although other calibres can be produced on request. The weapon has a four-round magazine and is intended to be carried with one further round in the chamber; the bolt has a three-position wing safety which permits unloading with the safety engaged. Accuracy using 0.308 Winchester ammunition is such that five shots can be grouped within a 25.4 mm mean radius at 91.4 m (100 yards).

The Ruger M77 Mark II is supplied without sights, although a pair of 25.4 mm scope rings is provided to accommodate an optical sight of the user's choice. A Harris detachable pivoting bipod is also provided as standard, as are a sling, sling swivels and a cleaning kit. A suppressor may be fitted over the muzzle.

A 5.56 mm version of this rifle is available.

Ruger 7.62 mm M77 Mark II rifle

Specifications
Cartridge: 7.62 × 51 mm (0.308 Winchester)
Operation: bolt-action, single shot
Locking: rotating bolt
Feed: 4-round magazine
Weight: empty, approx 4.42 kg
Length: 1.184 m
Barrel: 660 mm
Rifling: 6 grooves, rh, 1 turn in 254 mm
Sights: optical, attached as required by user

Manufacturer
Sturm Ruger & Company, 200 Ruger Road, Prescott, Arizona 86301.

Status
In production.

UPDATED

Savage 5.56 mm and 7.62 mm Model 10FP and Model 110FP Sniper

Description
The Savage Model 10FP is specifically designed for police and military sniper units and features dual pillar bedding, a system where steel 'pillars' are moulded into the stock and the rifle action is mounted directly onto them, resulting in an extremely stable and rugged bedding system. The Model 10FP barrel is button rifled and fully free floating. The rifle is drilled and tapped for standard telescope mounts; there are no open sights. A left-handed version is also available.

The Model 110FP is similar to the Model 10FP except that it has a heavier barrel, a longer action and is available in other calibres, including 0.300 Winchester Magnum.

Specifications
Model 10FP
Cartridge: 5.56 × 45 mm NATO or 7.62 × 51 mm NATO
Operation: bolt action, single shot
Feed: 5-roung box magazine
Weight: without telescope, 3.6 kg
Length: ca 1.137 m
Barrel: 610 mm
Rifling: 5.56 mm, rh, 1 turn in 229 mm; 7.62 mm, rh, 1 turn in 254 mm
Muzzle velocity: 5.56 mm, ca 1,000 m/s; 7.62 mm, ca 777 m/s

Manufacturer
Savage Arms Inc, 100 Springdale Road, Westfield, Massachusetts 01085.

Status
In production.

VERIFIED

Springfield Armory M21 tactical rifle

Description
The Springfield Armory M21 tactical rifle is based on the now largely withdrawn M21 sniper rifle but with some improvements. The adjustable walnut stock is of a new pattern, with adjustable cheekpiece and rubber recoil pad, having the rifle action and barrel bedded in glass fibre resin. The heavy barrel is specially made by Douglas, air-gauged and has a twist of one turn in 254 mm. Hart stainless steel or Krieger barrels are available to special order.

Springfield's rugged Third Generation scope mount and × 4 to × 14 × 56 Government Model range-finding scope are recommended accessories.

Springfield Armory 7.62 mm M21 tactical rifle

NEW/0116668

Specifications
Cartridge: 7.62 × 51 mm
Operation: gas, semi-automatic
Locking: rotating bolt
Feed: 10-round box magazine
Weight: without scope, 5.1 kg
Length: 1.1175 m
Barrel: 559 mm
Rifling: 4 grooves, rh, 1 turn in 254 mm
Sights: fore, fixed post; rear, hooded aperture; optical to suit user requirements
Sight radius: 679 mm
Muzzle velocity: 853 m/s

Manufacturer
Springfield Inc, 420 West Main Street, Geneseo, Illinois 61254.

Status
Available.

VERIFIED

Stoner SR-25 7.62 mm rifles

Development

Knight's Armament Company has designed and produced a 7.62 mm version of the M16 rifle, thereby marking a reversion to the Stoner 7.62 mm AR-10 of the mid-1950s. The design employs over 60 per cent of existing M16 parts and, with its similarity to the M16, costly retraining of personnel can be avoided. The Stoner SR-25 7.62 mm rifle has a possible US Army application as a support weapon in sniper teams where the 'second man' can have a local defence function, in addition to using the SR-25 as a replacement rifle should the main sniper rifle become disabled for any reason.

During early 2000 it was announced that NSWC/Crane were negotiating with the Knight's Armament Company for a base quantity of 100 SR-25 rifles. Each rifle will have a MIL-STD-1913 sight rail, a M3 optical sight, a bipod and case and other accessories, including ten 20-round magazines for each rifle. Annual options were for 150 (first year) and 105 (second year). It is presumed that these rifles are for Special Operations Command (SOCOM).

Description

On the Stoner SR-25 7.62 mm rifles the upper receiver and gas block have a flat top Picatinny Rail design, allowing the user to adopt a variety of options, including a carrying handle and iron sights. The handguard is attached only at the receiver end, providing a fully floating barrel and avoiding any change in zero when used with a bipod. Initial testing demonstrated the ability to achieve groups of less than 19 mm at 100 m range.

Variants

Stoner SR-25 7.62 mm Match Rifle

Intended for target shooting, the Stoner SR-25 7.62 mm Match Rifle has a Remington 5R carbon steel free-floating barrel with a twist of one turn in 286 mm, optimised for commercial Match ammunition with a 168 grain bullet. The barrel is 610 mm long and overall length is 1.105 m; weight is 4.87 kg.

Stoner SR-25 7.62 mm Lightweight Match Rifle

The Stoner SR-25 7.62 mm Lightweight Match Rifle has the same key features as the Match Rifle but the Remington 5R barrel is machined to a medium contour and reduced in length to 508 mm. Overall weight is reduced to 4.3 kg. The size, weight and accuracy of this combination are intended to meet law enforcement and action shooting requirements.

Stoner SR-25 7.62 mm Carbine

The Stoner SR-25 7.62 mm Carbine follows the same general lines as the other SR-25 series but the barrel length is reduced to 406 mm and the overall length is 914 mm. A special shortened fluted non-slip handguard is provided. Weight is 3.515 kg.

Stoner SR-25 7.62 mm Sporter

In many ways the Stoner SR-25 7.62 mm Sporter marks a return to the overall concept of the Stoner 7.62 mm AR-10 but there are many detail design changes. The overall appearance is that of an enlarged AR-15/M16 rifle, with the carrying handle and sight assembly removable revealing a Picatinny Rail capable of mounting numerous optical sights and other sighting systems. The handguards are M16A2 pattern components. Overall length is 990 mm and the barrel length is 508 mm; weight is 3.97 kg. The barrel is not free floating on this model.

Stoner SR-25 K Model 7.62 mm Assault Rifle

A special military variant of the SR-25 Carbine, the K Model shares additional parts commonality with the Colt 5.56 mm M4 Carbine and its telescoping stock components. This provides a reduced carry length of 838 mm with an extended length of 921 mm. The special 406 mm target grade barrel, enclosed by a free floating handguard, has a 'heavy target' profile but is deeply fluted to reduce the overall weapon weight to 3.85 kg, including an optical scope sight. Also provided are folding front and rear iron sights which will fit all other SR-25 series rifles.

Stoner SR-47 7.62 mm Special Forces rifle

The Stoner SR-47 7.62 mm Special Forces rifle was developed within a period of weeks during early 2002 to meet an urgent US Special Forces requirement. In view of their deployment to Afghanistan, US Special Forces requested a rifle firing the Eastern Bloc 7.62 × 39 mm M1943 cartridge, including a low-velocity form to allow a sound and flash suppressor to be used. The result was the so-called SR-47. No further details have been released.

Specifications

Base rifle

Cartridge: 7.62 × 51 mm NATO
Operation: gas, semi-automatic
Locking system: rotating bolt
Feed: 10- or 20-round box magazine
Weight: with magazine, 4.88 kg
Length: 1.1175 m

Manufacturer

Knight's Armament Company, 7750 9th Street SW, Vero Beach, Florida 32968.

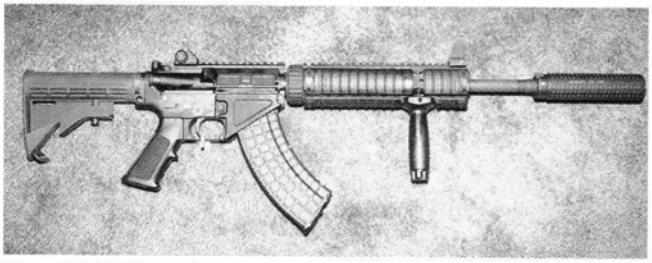
Status

Available.

UPDATED

Stoner SR-25 7.62 mm Lightweight Match Rifle with Leupold Vari-X scope

Stoner SR-25 Model K 7.62 mm Assault Rifle



Stoner SR-47 7.62 mm Special Forces rifle (T J Gander) ***NEW***/0132064

Stoner SR-25 7.62 mm Carbine with Leupold Vari-X scope

C-MAG 5.56 mm 100-round magazine

Description

The C-MAG is a twin-drum high-capacity ammunition magazine for rifles, light support weapons, firing port and other specialised weapons in 5.56 mm calibre. Covered by US and other patents, its main components are constructed of high-impact plastic. Avoiding trouble-prone compression springs, the C-MAG utilises a unique rotation device and low torsion stress springs which ensure positive control of each round and proper feeding. This design makes the C-MAG the world's first magazine capable of providing a full 100-round capacity and yet which can be preloaded and stored indefinitely. The design provides for equal distribution of the ammunition in each of the twin drums located on either side of the weapon. This results in a fixed centre of gravity during firing, an important attribute during full-automatic performance. The compact size allows for better ground clearance and light weight. The C-MAG loads and functions just like standard magazines. It may be reloaded and reused repeatedly.

Loading does not demand disassembly or special tools. The cartridges are loaded by pressing them into the feed aperture in the same way as a normal straight magazine. The cartridges will automatically feed alternately into each drum. Loading can be done by hand or by an appropriate mechanical loader. The springs are tensioned during the loading operation, without the need for any supplementary operations. The magazine does not need to be empty to be loaded and remains completely operational at all times. Loading may be stopped at any point, the magazine inserted into the weapon and the C-MAG is ready for immediate operation.

The key feature of the C-MAG is the formation of the double rows of cartridges in each of the drums. The diagram illustrates how these double rows are formed in the interior of the magazine. Also shown are 15 solid spacer rounds, two pusher arm assemblies and the linked spacer round assembly. The solid spacer rounds occupy the feed clip when the magazine is empty. The number required depends on the length and style of the feed clip, which is specific to an individual weapon system. The pusher arm assemblies transfer the spring energy to the cartridges while being loaded and unloaded. In addition, they serve to maintain the proper orientation of the leading solid spacer rounds. The linked spacer round assembly is very important; this

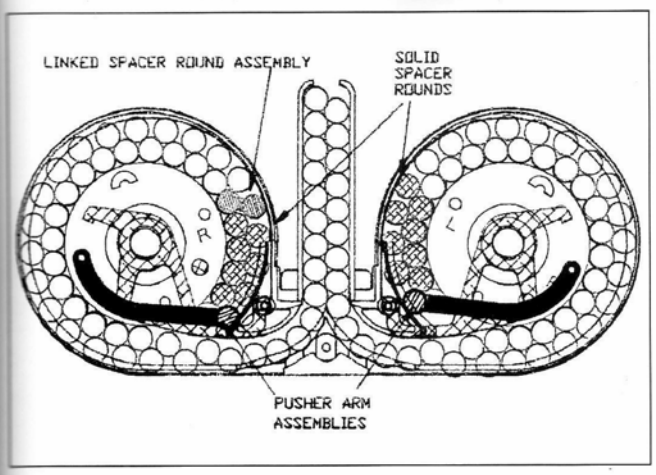
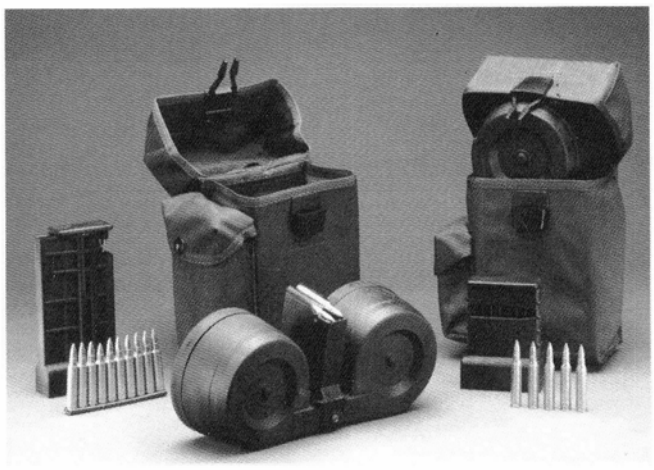


Diagram showing the feed system of the C-MAG magazine



C-MAG 5.56 mm 100-round magazine with accessories

when the magazine is empty and is linked so that it cannot fall out of the feed clip. The upper half of the assembly is tapered so that the weapon bolt will pass over it (when the last round has been fired) and stop in the closed position.

During loading the live cartridges are pressed into the feed clip. The column of spacer rounds and live cartridges are, as loading progresses, pushed into the drums. The cartridge column splits at the point where the feed clip joins the storage housing; this allows for the concurrent division of the stored ammunition on each side of the magazine. Further into each drum the cartridges are allowed to divide into two concentric rows for storage. Loading stops when the maximum number of cartridges has been inserted.

Unloading during firing is the reverse of the above process. As cartridges are stripped from the feed clip, so the column of cartridges advances to fill the space. The springs in the C-MAG are designed to provide virtually a constant amount of tension, regardless of the number of cartridges remaining in the magazine.

Because of the geometry of its construction, the C-MAG can be used on almost any modern 5.56 mm combat rifle or other weapon without modification to the weapon being required. While the current production model employs the NATO STANAG 4179 (M16) magazine interface, it is easily adaptable by the manufacturer to any other 5.56 mm weapon by substituting a feed clip designed for the particular magazine housing. The feed clip is the centrepiece of the C-MAG, detachable from the storage housing for maintenance or weapon compatibility purposes. The main storage housing is standard for all types of weapon; magazines can be ordered with compatible feed clips in place, or the changing can be done by the user. With the correct feed clip installed the C-MAG snaps into the standard magazine housing in the normal manner and is released by the weapon's magazine catch in the usual way.

Accessories available include mechanical and automatic loading devices holding 5, 10 and 100 cartridges for speed loading, as well as carrying pouches.

A C-MAG carrying 100 rounds of 9 × 19 mm Parabellum ammunition is available for the Heckler and Koch 9 mm MP5 sub-machine gun. For details see MP5 entry in Sub-machine guns section.

Specifications

Capacity: 100 5.56 mm cartridges
Ammunition: ball, tracer, blank rounds
Weight: empty, 1 kg
Dimensions: 251 × 81 × 120 mm
Rate of fire: up to 1,300 rds/min
Materials: main components: filled thermoplastic polyester; minor components: non-corrosive steel, alloy materials
Shelf life, loaded: indefinite

Manufacturer

The Beta Company, 2137B Flintstone Drive, Tucker, Georgia 30084.

Status

In production.

Service

US armed forces and many other countries worldwide, including Germany where special forces units employ them with the G36K short assault rifle.

UPDATED

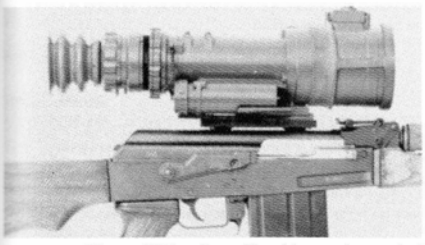
YUGOSLAVIA, FEDERAL REPUBLIC

Zastava 7.92 mm M76 semi-automatic sniper rifle

Description

Information received on the Zastava 7.92 mm M76 semi-automatic sniper rifle remains scanty, but it was said to be in production for the former Yugoslav armed forces and to be based on the FAZ family of automatic arms. In the standard version the receiver is adapted to handle a 7.92 mm cartridge; variants have also been manufactured to accept the RFAS 7.62 × 54R or 7.62 × 51 mm NATO cartridges. A 10-round detachable box magazine is fitted.

The M76 is fitted with a telescopic sight of × 4 magnification, apparently having much in common with the PSO-1 sight of the RFAS 7.62 mm Dragunov SVD (qv). It is stated to have a field of view (true) of 5° 10' and a sweeping range of 320 m for head silhouette (target height, 300 mm); 400 m for chest silhouette (500 mm); and 620 m for a running target (1.5 m). The most effective range is given as 800 m. The optical sight bracket is also designed to accept a passive optical night sight.



Zastava 7.92 mm M76 sniper rifle with passive optical night sight

Specifications

Cartridge: 7.92 mm (see text)
Operation: gas, self-loading
Locking: rotating bolt
Feed: 10-round detachable box magazine
Weight: 4.2 kg
Length: 1.135 m
Barrel: 550 mm
Rifling: 4 grooves, rh, 1 turn in 240 mm
Sights: fore, blade; rear, U-notch tangent, × 4 telescope
Muzzle velocity: 720 m/s
Max effective range: 1,000 m

Manufacturer

Zastava Arms, 29 Novembra 12, YU-11000 Belgrade.

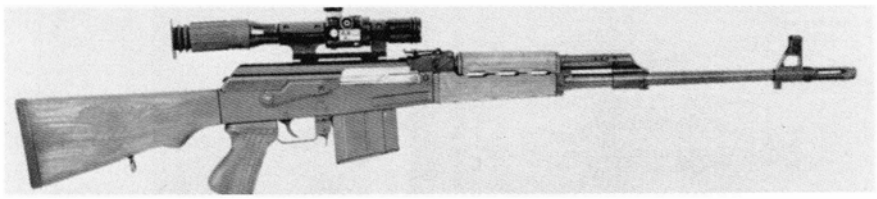
Status

Current production status uncertain.

Service

Former Yugoslav armed forces.

VERIFIED



Zastava 7.92 mm M76 sniper rifle with telescopic sight

AUSTRALIA

Precision Rifle Systems ATAS 0.50 BG anti-matériel rifle

Description

The bolt-action Precision Rifle Systems ATAS 0.50 BG anti-matériel rifle is an enlarged version of the smaller calibre ATAS rifles and was designed from the outset for military service. The ammunition fired is the standard 12.7 × 99 mm/0.50 Browning NATO cartridge.

To assist cartridge feed, the bolt action involves a triple lug rear-locking mechanism. A claw extractor of oversized dimensions in combination with a plunger ejector maintain positive extraction and ejection. The six-round magazine may be located either on the left-hand side of the rifle, in the usual position under the receiver, or on the right. The receiver and barrel are 4140 chromium molybdenum steel, with the option of 416 Inox (stainless steel) for operations in a marine environment. The barrel is manufactured by Tobler and is fitted with a muzzle brake.

The stock is fabricated steel and aluminium alloy, with non-structural, plug-in butt stock and foregrips. A fully adjustable bipod and sling rail are integral. The action interlocks with the stock. Bedding is machined metal-to-metal surfaces. A lighter version (13.5 kg) version is available with a shorter barrel and an alloy stock sub-frame. The optical sights are, according to the users' choice, mounted on an integral dovetail machined into the top of the receiver. Basic emergency iron sights are provided, the foresight being machined into the muzzle brake. An option is a × 1 collimating sight with a wide field of view and long eye relief. The sight contains a tritium night sight element or an optional LED illuminator.

A cleaning and maintenance kit is provided as standard. Storage and transport cases are available. Options are extensive, including a barrel of any required length, and a magazine capacity as specified.

An effective range of from 1,500 to 2,000 m, according to conditions, is claimed for this rifle.

Specifications

Cartridge: 12.7 × 99 mm NATO (0.50 Browning)
Operation: bolt action
Locking: 3 rear-located lugs
Feed: 6-round box magazine
Weight: empty magazine, collimating sight and bipod, 15.3 kg; lightweight version, 13.5 kg
Length: standard, 1.45 m
Barrel: overall, 800 mm; to face of receiver, 750 mm
Rifling: 8 grooves, rh, 1 twist in 381 mm
Muzzle velocity: 841-899 m/s
Max effective range: 1,500 to 2,000 m, according to conditions

Manufacturer

Precision Rifle Systems and Associates, 1 Pitt Street, Bundaberg, Queensland 4670.

Status

Available as required.

NEW ENTRY

CROATIA

MACS-M2A 12.7 mm sniper rifle

Description

The MACS-M2A sniper rifle fires the 12.7 × 99 mm (0.50 Browning) cartridge. It is a single-shot, bolt-action rifle with an optical sight and a multibaffle muzzle brake to reduce recoil forces. As far as can be determined there is no magazine, rounds being fed into the weapon individually by hand. Some individual user adjustments can be made on the bipod, cheek rest and butt-plate.

The optical sight involved is a Kahles ZF 10 × 42.

Variant

12.7 mm MACS M3
See following entry.

MACS-M2A 12.7 mm sniper rifle

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: bolt action, single shot
Feed: manual, single shot
Weight: rifle only, 11.3 kg; rifle with bipod and scope, 12.4 kg
Length: 1.47 m
Barrel: 790 mm
Sights: optical, Kahles ZF 10 × 42
Muzzle velocity: 855 m/s
Max effective range: 1,400 m

Manufacturer

Metallic, vl Krizman – Kernel, Kacjak br 4, Rijeka.

Marketing agency

RH – ALAN doo, Stančićeva 4, 10 000 Zagreb.

Status

Production complete.

Service

Croatian Army.

VERIFIED

MACS M3 12.7 mm sniper rifle

Description

The MACS M3 sniper rifle is essentially the MACS-M2A (see separate entry) reconfigured into a bullpup layout by moving the butt-stock assembly forward so that the bolt action protrudes well to the rear. This has been done to reduce the overall length to 1.11 m and reduce the weight, with bipod and optical sight, to 8.8 kg. Many of the components, including the manual bolt action and the optical sights, remain the same as those on the MACS-M2A, although the barrel length has been reduced slightly. The ballistic performance of the MACS M3 remains similar to that of the MACS-M2A.

MACS M3 12.7 mm sniper rifle (T J Gander)

NEW/0137825

Specifications
Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: bolt action, single shot
Feed: manual, single shot
Weight: rifle only, 7.65 kg; rifle with bipod and scope, 8.8 kg
Length: 1.11 m
Barrel: 760 mm
Sights: optical, Kahles ZF 10 × 42
Muzzle velocity: 850 m/s
Max effective range: ca 1,400 m

Manufacturer
Metallic, vl Krizman – Kernel, Kacjak br 4, Rijeka.

Marketing agency
RH – ALAN doo, Stančićeva 4, 10 000 Zagreb.

Status
Production complete.

Service
Croatian Army.

UPDATED

RT20 20 mm anti-matériel rifle

RT20 20 mm anti-matériel rifle (T J Gander) 0055865

Development

The Croatian RT20 20 mm rifle, described in Croatian sales literature as a 20 mm hand cannon, falls into the category of the anti-matériel rifle as it has a maximum operational range of 1,800 m. At that distance the ballistic limitations of the round fired, the 20 × 110 mm Hispano Suiza HS 404, are such that hitting precise point targets such as an individual would normally be problematic. However, hitting a soft-skin vehicle or an aircraft on the ground would be much more viable and rewarding.

The RT20 was initially developed as a means of penetrating the armoured protection for the thermal night sight carried on Serbian M-84 (Yugoslav T-72) tank turrets. During the initial stages of the recent Balkan troubles, the use of these tanks and their sights was a considerable hindrance to Croatian infantry movements under cover of darkness so the 20 mm cartridge was selected as the minimum AP round that could destroy the sight sensor housing. The RT20 proved successful in this role to the extent that other tactical roles were found, including the suppression of light fire support weapons, such as 20 mm air defence cannon, and bunkers. The designer was Ratko Jankovic.

Description

The 20 mm RT20 is a bullpup weapon. This configuration was selected to avoid the extreme overall length a conventional layout would have dictated, but it has also introduced some unusual design features.

One is that the RT20 is a single-shot bolt-action rifle with the manually operated bolt handle on the left-hand side of the receiver. The bullpup layout has meant that the bolt is at the extreme rear of the weapon, above and to the rear of the butt-plate. In view of the power of the cartridge employed, the bolt has three sets of locking lugs released by raising the bolt handle through 60°. Once the bolt is moved forward and locked, the rifle is fired normally and the second set of unusual RT20 features comes into play.

Firing 20 mm rifles from the shoulder has always introduced recoil problems, as any 20 mm cartridge carries a sizeable propellant load producing considerable recoil forces. One round fired is API, very similar to the API rounds fired from the Yugoslav M55 series of 20 mm light anti-aircraft guns and it is also possible to fire HE or HEI projectiles. The projectile will thus weigh about 130 to 140 g and have a muzzle velocity of 840 to 850 m/s. Firing such a round is likely to be a lively and painful procedure should a conventional rifle design be involved.

For this reason the RT20 does not have a conventional design. About halfway down the barrel is a block with an upwards-facing gas port. As the projectile passes this point, some of the propellant gases are tapped off via a ring of 24 holes and directed along a recoil compensation tube to be vented into the atmosphere behind and above the bolt area. As on recoilless weapons a cone-shaped area covering a rearwards arc of 60° is thus hazardous as the rifle is fired and has to be kept clear of obstacles. It follows that the RT20 cannot be fired with structures, such as walls, in close proximity to the rear. Also, under some circumstances the firing position might be disclosed.

The rearward escaping gases also mean that the firer cannot assume an orthodox firing position. Instead he has to lie at an angle to the left of the receiver with his right shoulder supporting the weapon and assuming some of the recoil forces. To attenuate the firing and supporting loads on the shoulder, recourse is made to pads of foam rubber around the shoulder contact position. Recoil forces are further reduced by a high efficiency multibaffle muzzle brake.

Aiming the RT20 involves a Kahles 6 × 42 telescopic sight with a long eye relief to ensure the firer's eye is not so close to the eyepiece that recoil might cause problems. To assist the firer a bipod is provided which can be adjusted in height from 215 to 295 mm.

The 20 mm API M60 round fired from M55 anti-aircraft guns retains sufficient energy to penetrate most soft-skinned targets at 1,800 m and may even be able to penetrate lightly armoured vehicles at reduced ranges. The HE M57 round contains a small charge of TNT or RDX/Aluminium.

Despite its weight the standard RT20 can be carried by one man using a special backpack. A later RT20 variant weighs 19.2 kg complete with bipod and optical sight (compared to an original 26 kg), has a revised bipod arrangement and a small monopod added just forward of the butt-plate. Further development has resulted in the RT20 M1 with the weight, complete with bipod and optical sight, reduced still further to 16 kg. For this model the barrel is lighter and some changes have been made to the gas tap-off system area. Another innovation is an extra port drilled through the top of the muzzle brake to reduce barrel lift on firing. The RT20 M1 is still at the prototype stage.

Prototype of RT20 M1 20 mm anti-matériel rifle (T J Gander) 0055864

Specifications

Cartridge: 20 × 110 mm (20 mm Hispano Suiza HS 404)
Operation: bolt action, single shot
Locking: 3 forward lugs, rotary bolt
Feed: manual, single shot
Weight: RT20 with bipod and scope, 19.2 kg; RT20 M1 with bipod and scope, 17 kg
Length: overall, 1.33 m
Barrel: 920 mm
Sights: optical, Kahles ZF 6 × 42
Muzzle velocity: AP, 840 m/s; HE, HEI, 850 m/s
Max effective range: ca 1,800 m
Max possible range: 8,000 m

Manufacturer
Metallic, vl Krizman – Kernel, Kacjak br 4, Rijeka.

Marketing agency
RH – ALAN doo, Stančićeva 4, 10 000 Zagreb.

Status
In production.

Service
Croatian Army.

VERIFIED

Falcon 12.7 mm anti-matériel rifle

Development

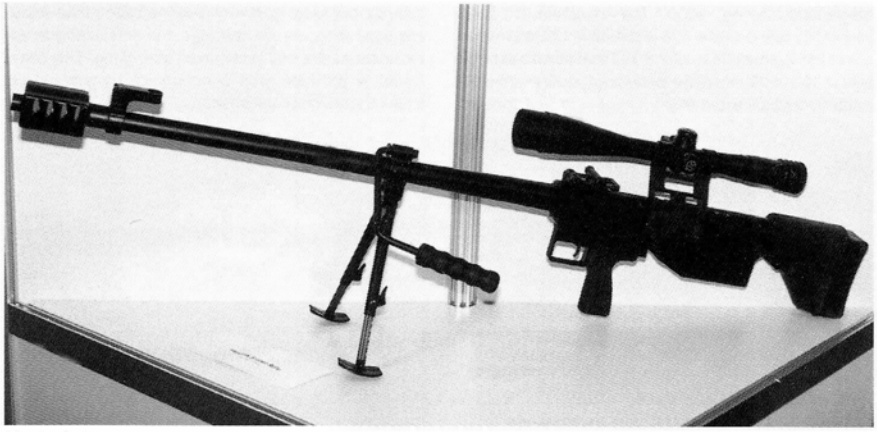
The prototype of the Falcon 12.7 mm anti-matériel rifle was known as the OPV 12.7 mm or Model 96. From its inception it was intended that versions firing either 12.7 × 107 mm or 12.7 × 99 mm (0.50 Browning) would be available. The original barrel was 1.027 m long and rifled to accommodate either cartridge; full production models have different barrels to suit each cartridge. The 12.7 × 107 mm version is now known as the OP 96, while the 12.7 x 99 mm model is the OP 97.

Description

The Falcon 12.7 mm anti-matériel rifle is a manual bolt-action rifle with a bullpup configuration. The rotary bolt action involves two large locking lugs, with recoil attenuation provided by a 75 per cent efficient, four-baffle muzzle brake and a buffer spring inside the detachable butt-stock. Feed is from a two-round box magazine, although a magazine well cover can be inserted when single shot only firing is required. For transport or storage the butt-stock can be removed while the barrel can be unscrewed from the receiver once a locking lever has been held depressed; if necessary the barrel can be handled using the carrying handle. A folding bipod is mounted on the carrying handle bracket. A safety lever is located just behind and above the pistol grip and trigger mechanism assembly.

The standard optical sight is a special ZD 10 × 40 scope which is claimed to provide accurate aiming up to a range of 2,000 m, with groupings of 150 mm at 1,000 m possible by trained users. The sight reticle can be illuminated by power supplied by two 3 V batteries. The optical sight weighs 1.65 kg complete. Night sights are also available.

When optical sights are not in use folding iron sights are provided. One optional accessory is a sling.



Model 96 Falcon 12.7 mm anti-matériel rifle (T J Gander) 0053900

Specifications

Data for 12.7 × 107 mm; where 12.7 × 99 mm differs, shown in parenthesis

Cartridge: OP 96, 12.7 × 107 mm (OP 97, 12.7 × 99 mm/0.50 Browning)
Operation: manual bolt action
Locking: two lug rotating bolt
Feed: 2-round box magazine or single shot
Weight: OP 96 loaded with 2 rounds, 13 kg; single shot, 12.3 kg (OP 97 loaded with 2 rounds, 12.5 kg; single shot, 11.8 kg)
Length: 1.38 m (1.26 m)
Barrel: 927 mm (838 mm)
Sights: ZD 10 × 50 optical; fore iron sights, post on folding carrier; rear, folding, notch adjustable for elevation and windage
Muzzle velocity: 790-850 m/s (855-925 m/s)
Max effective range: optical sight, 2,000 m; night sight, 1,000 m
Armour penetration: 25 mm at 100 m (15 mm at 200 m)

Manufacturer

Zbrojovka Vsetín as, Jasenice 1254, 755 37 Vsetín.

Marketing agency

Omnipol, Nekázanka 11, 112 21 Prague 1.

Status

Available.

VERIFIED

FINLAND

Helenius 12.7 mm APH RK97 anti-matériel rifle

Description

Introduced during 1996, the Helenius 12.7 mm APH RK97 anti-matériel rifle is available chambered for either the Eastern Bloc 12.7 × 107 mm cartridge or the NATO 12.7 × 99 mm (0.50 Browning). Both models are visually identical externally.

The APH RK97 is a single-shot rifle employing a vertical falling breech block, operated by a sliding foregrip located just forward of the trigger group pistol grip. Pushing the foregrip forward causes the breech block to drop allowing a cartridge to be manually introduced into the breech. Sliding the foregrip to the rear raises and locks the breech block for firing. The heavy barrel is provided with a pepperpot pattern muzzle brake to reduce recoil effects.

No iron sights are provided so the optical sights involved, which are offset slightly to the left, can vary according to user preference. A fixed-height, folding bipod is secured to the front of the square section receiver.

The APH RK97 has been tested with a muzzle-mounted sound suppressor.

Specifications

Cartridge: 12.7 × 107 mm or 12.7 × 99 mm (0.50 Browning)
Operation: single-shot, manually actuated, vertical breech block
Weight: 14 kg
Length: 1.33 m
Barrel: 940 mm
Rifling: 8 grooves, rh; 1 twist in 381 mm
Sights: optical, as required

Manufacturer

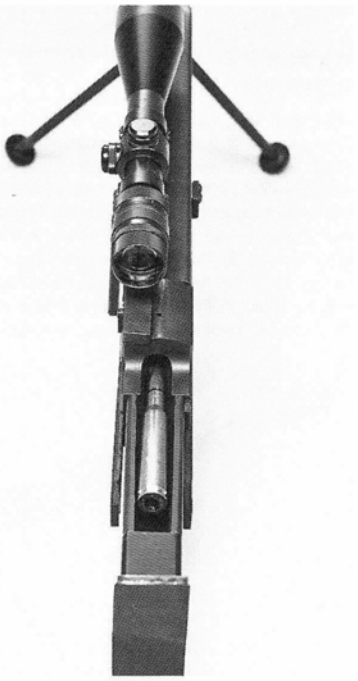
Gunsmith Asepaja Helenius, Myllöntie 13, FIN-24280 Salo, Finland.

Status

Available.

VERIFIED

Helenius 12.7 mm APH RK97 anti-matériel rifle



Close-up of breech area of Helenius 12.7 mm APH RK97 anti-matériel rifle in the loading mode

Helenius 12.7 mm RK99MK1 anti-matériel rifle

Description

Introduced during 2000, the Helenius 12.7 mm RK99MK1 anti-matériel rifle is available chambered for either the Eastern Bloc 12.7 × 107 mm cartridge or the NATO 12.7 × 99 mm (0.50 Browning). Both models are visually identical externally.

The RK99MK1 is a single-shot bolt action rifle. The one-piece bolt is short and is completely removed from the rifle for loading. It is locked into position using two sets of interrupted threads along the entire length of the bolt. Before loading, the rims at the base of the round are used to locate the cartridge, the rims acting as the extractor as the bolt is removed after firing. The heavy barrel is provided with a pepperpot pattern muzzle brake to reduce recoil effects.

No iron sights are provided so the optical sights involved can vary according to user preference. No bipod or other similar accessories are provided, the only user comfort feature being a rubber butt pad.

Specifications

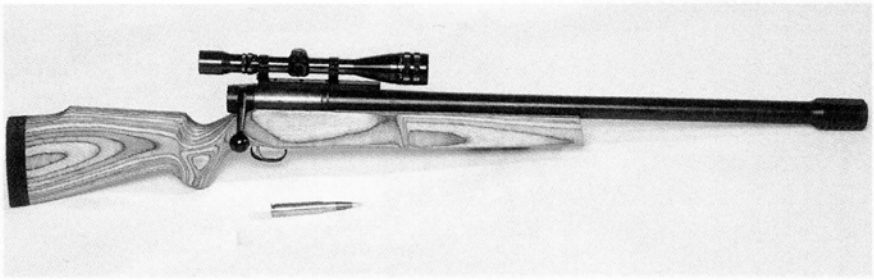
Cartridge: 12.7 × 107 mm or 12.7 × 99 mm (0.50 Browning)
Operation: single-shot, manually actuated bolt
Weight: ca 13 kg
Length: 1.45 m
Barrel: 820 mm
Rifling: 8 grooves, rh; 1 twist in 381 mm
Sights: optical, as required

Manufacturer

Gunsmith Asepaja Helenius, Myllöntie 13, FIN-24280 Salo, Finland.

Status

Available.



Helenius 12.7 mm RK99MK1 anti-matériel rifle **NEW**/0077718

VERIFIED

Helenius 12.7 mm RK99 anti-matériel rifle

Description

Introduced during 2000, the Helenius 12.7 mm RK99 anti-matériel rifle is available chambered for either the Eastern Bloc 12.7 × 107 mm cartridge or the NATO 12.7 × 99 mm (0.50 Browning). Both models are visually identical externally.

The RK99 is a single-shot bolt action rifle but is described as a pump action rifle. The one-piece bolt is short and is locked into position using two sets of interrupted threads along the entire length of the bolt. Rounds are fed from a box magazine under the receiver. As a horizontal actuating handle on the left of the receiver is pushed forward a round is fed into the chamber and the bolt rotates and locks. Pulling back the handle unloads the rifle. The heavy barrel is provided with a pepperpot pattern muzzle brake to reduce recoil effects.

No iron sights are provided so the optical sights involved can vary according to user preference. A bipod, cheek rest and butt pad are provided.

Specifications

Cartridge: 12.7 × 107 mm or 12.7 × 99 mm (0.50 Browning)
Operation: single-shot, manually actuated bolt
Weight: ca 12 kg
Length: 1.3 m
Height: 330 mm
Barrel: 820 mm
Rifling: 8 grooves, rh; 1 twist in 381 mm
Sights: optical, as required

Manufacturer

Gunsmith Asepaja Helenius, Myllöntie 13, FIN-24280 Salo, Finland.

Status

Available.

Helenius 12.7 mm RK99 anti-matériel rifle **NEW**/0077722

VERIFIED

Helenius 20 mm APH RK20 anti-matériel rifle

Description

The Helenius 20 mm APH RK20 anti-matériel rifle is a scaled-up version of the 12.7 mm APH RK97 (see separate entry) firing the 20 x 99R ShVAK cartridge originally designed for the RFAS ShVAK aircraft cannon dating back to the early period of the Great Patriotic War (1941-1945). This cartridge, described in Finland as the 20 x 100 mm Swak, has a nominal muzzle velocity of 860 m/s and a muzzle energy of 35.9 kJ so its on-target performance in the anti-matériel role should provide more than adequate at long ranges. However, the unsophisticated ballistic outline of the high explosive projectile, together with its flat-nosed impact fuze, would seem to indicate that accuracy could be problematic.

The APH RK20 is a single-shot rifle employing a vertical falling breech block, operated by a sliding foregrip located just forward of the trigger group pistol grip. Pushing the foregrip forward causes the breech block to drop, allowing a cartridge to be manually introduced into the reinforced breech. Sliding the foregrip to the rear raises and locks the breech block for firing. The heavy barrel is provided with a prominent pepperpot pattern muzzle brake to reduce recoil effects and the shoulder plate has a thick rubber recoil pad.

No iron sights are provided so the optical sights involved, offset to the left on a bracket secured to the barrel, can vary according to user preference. A fixed-height, folding bipod is secured to the front of the square section receiver.

Specifications

Cartridge: 20 × 99R ShVAK
Operation: single-shot, manually actuated, vertical breech block
Weight: 22.5 kg
Length: 1.4 m
Barrel: 860 mm
Rifling: 8 grooves, rh; 1 twist in 762 mm
Sights: optical, as required

Manufacturer

Gunsmith Asepaja Helenius, Myllöntie 13, FIN-24280 Salo, Finland.

Status

Available.

VERIFIED

Helenius 20 mm APH RK20 anti-matériel rifle
0053899

Helenius 20 mm RK99MK2 anti-matériel rifle

Description

As with the Helenius 20 mm APH RK20 described in the previous entry, the Helenius RK99MK2 fires the 20 x 99R ShVAK cartridge. However, unlike the APH RK20, the RK99MK2 is a single-shot bolt action rifle, the short bolt being removed from the receiver for loading. The heavy barrel is provided with a large pepperpot pattern muzzle brake to reduce recoil effects. If required, the rifle can be broken down into two parts for transport.

No iron sights are provided so the optical sights involved can vary according to user preference. A bipod, cheek rest and butt pad are provided.

Specifications

Cartridge: 20 × 99R ShVAK
Operation: single-shot, manually actuated bolt
Weight: ca 20 kg
Length: 1.47 m
Height: 330 mm
Barrel: 870 mm
Rifling: 8 grooves, rh; 1 twist in 762 mm
Sights: optical, as required

Manufacturer

Gunsmith Asepaja Helenius, Myllöntie 13, FIN-24280 Salo, Finland.

Status

Available.

VERIFIED

Helenius 20 mm RK99MK2 anti-matériel rifle
NEW/0077719

HUNGARY

12.7 mm Gepard M1 and M1A1 sniper rifles

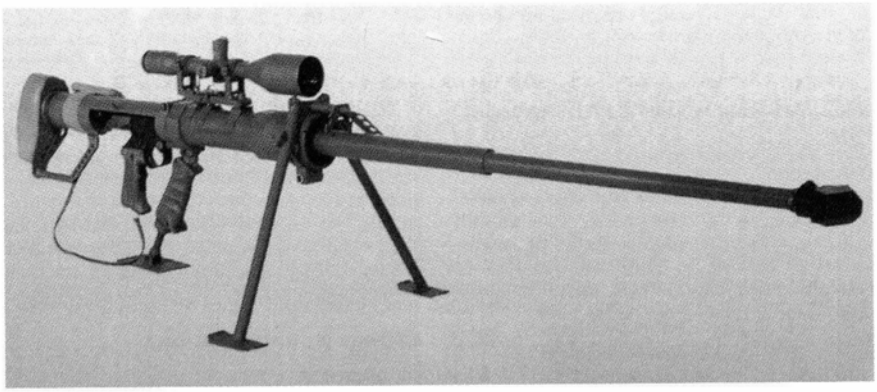
Description

The 12.7 mm Gepard M1 and M1A1 sniper rifles are single-shot weapons with an unconventional breech mechanism. The pistol grip acts as the bolt handle and is attached to a multiple-lug breech block. The unit also contains a simple manually cocked hammer mechanism. To load, the pistol grip is partly rotated to unlock the breech block and then withdrawn, exposing the chamber. The cartridge is inserted and the breech block replaced, the hammer is cocked and then the trigger pressed. There is a grip for the disengaged hand on the butt and a substantial cheek pad. The rifle is provided with an adjustable bipod but a standard PKM machine gun tripod can also be used. A high-efficiency muzzle brake is fitted. The usual aiming system is a 12 × 60 telescopic sight; night sights can be employed with both rifles.

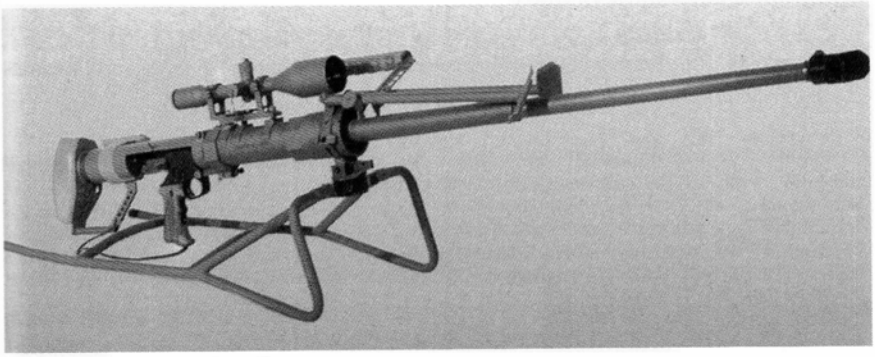
The Gepard M1 and M1A1 rifles are chambered for the 12.7 × 107 mm B-32 or MDZ-3 AP-T cartridge. This is sufficiently accurate to permit a trained firer to achieve a 300 mm group with five shots at 600 m range, and the kinetic energy of the bullet makes it ideal for engaging targets behind the types of cover commonly found in urban areas. At 600 m the AP-T round can penetrate 15 mm of homogeneous armour or up to 30 mm at 100 m. Maximum effective aimed range at a vehicle-sized target is 2,000 m.

The Gepard M1A1 is basically the same rifle as the Gepard M1 but the weapon is mounted on a back-pack frame which can double as an aiming mount on soft ground or snow.

It has been proposed that both these rifles could be manufactured to fire 12.7 × 99 mm (0.50 Browning) ammunition.



12.7 mm Gepard M1 sniper rifle



12.7 mm Gepard M1A1 sniper rifle

Specifications

Cartridge: 12.7 × 107 mm
Operation: manual bolt action
Feed: manual, single shot
Weight: M1, 19 kg; M1A1, 22 kg
Length: 1.57 m
Barrel: 1.1 m
Sight: optical, 12 × 60
Muzzle velocity: 842 m/s
Muzzle energy: 17,181 J
Striking energy: >5,800 J at 1,000 m
Penetration: 30 mm RHA at 100 m; 15 mm at 600 m
Max effective range: LAV, 2,000 m; personnel, 1,200 m

Manufacturer

Technika, PO Box 125, Salgótarjáni u. 20, H-1475 Budapest.

Status

In production.

Service

Offered for export sales.

VERIFIED

12.7 mm Gepard M2 and M2A1 rifles

Description

Although based on the Gepard M1 sniper rifle the Gepard M2 is intended to be used as more of an anti-matérial rifle (AMR) and differs mainly in having a semi-automatic action in place of the single-shot mechanism of the Gepard M1 and M1A1. Using a positively locked long recoil system, the Gepard M2 and M2A1 can feed 12.7 × 107 mm rounds from a 5- or 10-round vertical box magazine located next to the pistol grip and trigger assembly.

All other aspects of the Gepard M2 are otherwise similar to the Gepard M1 and they fire the same ammunition, although the effective aimed range is reduced to 1,000 to 1,200 m.

The Gepard M2A1 is a shortened version of the Gepard M2 intended for use by airborne and special forces. The Gepard M2A1 employs a single point sight in place of the 6 × 42 scope used with the Gepard M1 and it has no provision for a night sight.

It has been stated that both these rifles could be manufactured to fire 12.7 × 99 mm (0.50 Browning) ammunition.

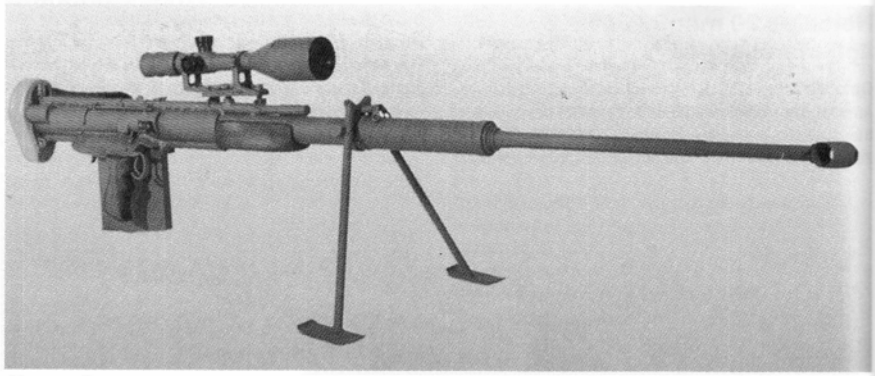
Specifications
Data for M2, where M2A1 differs, shown in parentheses
Cartridge: 12.7 × 107 mm
Operation: long recoil, semi-automatic
Weight: 16 kg (15 kg)
Length: 1.536 m (1.266 m)
Barrel: 1.1 m (830 mm)
Sight: optical, 6 × 42 (single point)
Muzzle velocity: 838 m/s (785 m/s)
Muzzle energy: 16,700 J (15,100 J)
Penetration: 25 mm RHA at 100 m; 15 mm at 600 m
Max effective range: 1,200 m (1,000 m)

Manufacturer
Technika, PO Box 125, Salgótarjáni u. 20, H-1475 Budapest.

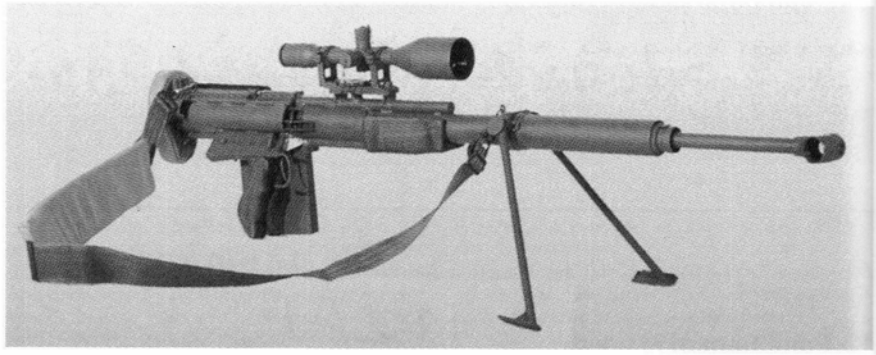
Status
In production.

Service
Offered for export sales.

VERIFIED



12.7 mm Gepard M2 rifle



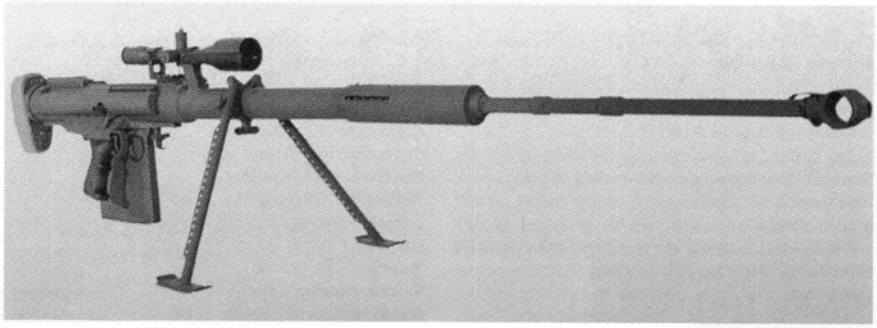
12.7 mm Gepard M2A1 rifle

14.5 mm Gepard M3 anti-matériel rifle

Description
The 14.5 mm Gepard M3 anti-matériel rifle, also known as the Destroyer, is a self-loading, bipod-mounted weapon designed to provide accurate heavy-calibre fire for the engagement of lightly armoured vehicles, helicopters, field defences and targets at longer ranges.

The rifle is chambered for the Soviet 14.5 × 114 mm cartridge. It is recoil operated and the design incorporates a hydraulic buffer and a highly efficient muzzle brake, so that the felt recoil is of about the same level as a heavy game rifle.

Using 14.5 × 114 mm B-32 AP-T ammunition, the Gepard M3 can penetrate 30 mm of homogeneous armour at 100 m and 25 mm at 600 m. Maximum effective range is 1,000 m.



14.5 mm Gepard M3 anti-matériel rifle

Specifications
Cartridge: 14.5 × 114 mm
Operation: long recoil, semi-automatic
Feed: 5- or 10-round box magazine
Weight: 21 kg
Length: 1.88 m
Barrel: 1.63 m
Sight: optical, 12 × 60
Muzzle velocity: 1,002 m/s
Muzzle energy: 32,000 J
Penetration: steel plate: 30 mm at 100 m; 25 mm at 600 m
Max practical range: 1,000 m

Manufacturer
Technika, PO Box 125, Salgótarjáni u. 20, H-1475 Budapest.

Status
In production.

Service
Offered for export.

VERIFIED

12.7 mm Gepard M4 SA1 anti-matériel rifles

Development
The 12.7 mm Gepard M4 SA1 anti-matériel rifle may be regarded as a development in the series of anti-matériel rifles that commenced with the Gepard M1/M1A (qv). The Gepard M4 SA1 is a semi-automatic rifle that can be chambered for either 12.7 × 107 mm or 12.7 × 99 mm NATO (Browning) ammunition. Development is stated to be complete with production awaiting orders.

Also under development is a Gepard M5, initially chambered for 12.7 × 107 mm ammunition. This will feature a 1.1 m barrel and will be of the repeater type.

Description
The Gepard M4 SA1 anti-materiél rifles are semi-automatic, operating on the long recoil principle with the breech block having an eight-lug rotary locking head. The hammer-type firing mechanism is inside the butt stock. Ammunition is fed from a 5-round box or a 10-round drum magazine located under the receiver.

12.7 mm Gepard M4 SA1 anti-matériel rifle with 10-round drum magazine and transport bag (D Markov)

12.7 mm Gepard M4 SA1 anti-matériel rifle with 5-round box magazine (D Markov)

initial cocking is accomplished using a folding bolt handle on the right-hand side of the receiver. A practical rate of fire of 30 rds/min is claimed.

As the firer assumes the aiming position the sight line is 383 mm above the ground surface; barrel height is 280 mm. The rifle is supported on a forward- or backward-folding bipod secured either side of the barrel housing. In the firing position the heavy fixed barrel has its axis directly in line with the firer's shoulder. A cheek rest is adjustable both vertically and horizontally while an adjustable rubber shoulder pad is also provided. The butt houses a retractable monopod leg for added weapon stability in the firing position, when required.

Aiming is carried out using a 12 × 60 telescopic sight although other sights, including night sights, can be accommodated. Recoil forces are reduced by counter-balancing the moving parts, with further attenuation provided by a single-baffle muzzle brake.

The effective range against a 2 m high target is given as 500 m, with an effective range of 1,500 m against larger targets. Armour penetration at a range of 600 m when firing 12.7 × 107 mm AP-I B-32 ammunition is 10 mm; when firing 12.7 × 99 mm AP-I M8 the figure is 8 mm. Service life is given as 5,000 rounds.

The weapon can be carried using a carrying handle or, using an optional carrying strap, slung over a shoulder or across the back. The overall length can be reduced by 215 mm for carrying. If required, the weapon can be transported inside a special transport bag carried on a metal frame backpack.

Specifications

Cartridge: 12.7 × 107 mm or 12.7 × 99 mm (0.50 Browning)
Operation: semi-automatic, long recoil
Locking: 8-lug rotating bolt head
Feed: 5-round box magazine or 10-round drum
Weight: without magazine but with day sight, 17 kg
Length: 1.45 m
Barrel: 800 mm
Sights: optical, 12 × 60
Sight radius: iron sights, 520 mm
Muzzle velocity: 12.7 × 107 mm AP-I B-32, 792 m/s; 12.7 × 99 mm AP-I M8, 825 m/s
Muzzle energy: 12.7 × 107 mm AP-I B-32, 15 kJ; 12.7 × 99 mm AP-I M8, 14 kJ
Max effective range: >2,000 m; personnel targets, >1,200 m

Marketing agency

Landimex Limited, Hajós utca 31, H-1065 Budapest.

Status

Development complete.

VERIFIED

INTERNATIONAL

Hecate II 12.7 mm sniper rifle

Development

The Hecate II 12.7 mm sniper rifle was originally designed and manufactured by PGM Precision of Poisy, France. A marketing agreement was subsequently drawn up with FN HERSTAL of Belgium who now market the rifle under their own name. Further marketing is carried out in the USA by FNH USA.

Description

The Hecate II 12.7 mm sniper rifle is based on the PGM UR Intervention® sniper rifle (see separate entry in Rifles section) but with the Hecate II the overall scale is enlarged to accommodate the 12.7 × 99 mm (0.50 Browning) cartridge. Using this cartridge the Hecate II is claimed to be highly effective at ranges up to 1,500 m, although performance will depend on the type of ammunition involved.

The modular frame construction of the UR Intervention and Commando models (see entries under Rifles) is retained for the Hecate II although the overall dimensions are much enlarged. The magazine capacity is increased to seven rounds and the stock assembly can be rapidly removed for transport purposes. The match grade heavy barrel, 700 mm long, is fluted and is fitted with a large single-baffle muzzle brake assembly which is claimed to be so efficient that the recoil forces imposed on the firer are no greater than those produced by a 7.62 mm rifle.

To assist in carrying the Hecate II a collapsible carrying handle is provided; the stock is also removable with recourse to tools. Once the weapon is in the firing position an optional and adjustable stock support can be added under the stock assembly. Early Hecate II models employed an M60 pattern folding bipod, although this was changed to other fully adjustable types on later models. Other features for the firer are that the bolt handle can be removed instantly for security or other reasons and the sear safety is moved to the right of the receiver.

The Hecate II Suppressed model is provided with an Ops Inc sound suppressor secured in place over the barrel; the muzzle brake is removed. The weight, without an optical sight, is increased to approximately 17.24 kg.

Hecate II 12.7 mm sniper rifle; the 7-round box magazine is not in place (T J Gander) ***NEW***/0106025

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: bolt action, single shot
Locking: rotating bolt, 3 front locking lugs
Feed: 7-round box magazine
Weight: ca 16.33 kg, according to configuration
Length: overall, 1.384 m; stock disassembled, 1.11 m
Barrel: 700 mm
Rifling: 8 grooves, rh, 1 turn in 381 mm
Sights: optical, to choice
Max effective range: >1,800 m

Manufacturer

PGM Precision, BP29, F-74334 Poisy Cedex.

Marketed by

FN HERSTAL, Voie de Liège 33, B-4040 Herstal.

Status

Available.

Service

French Army and some other armed forces.

UPDATED

Nemesis 12.7 mm sniper rifle

Development

The Nemesis II 12.7 mm sniper rifle is under development by PGM Precision of Poisy, France, to be marketed by FN HERSTAL of Belgium who will market the rifle under their own name. Further marketing will be carried out in the USA by FNH USA.

Compared to the Hecate II 12.7 mm sniper rifle, the Nemesis is built around a smaller and lighter system based on the Ultima Ratio rifles (see separate entries under Rifles).

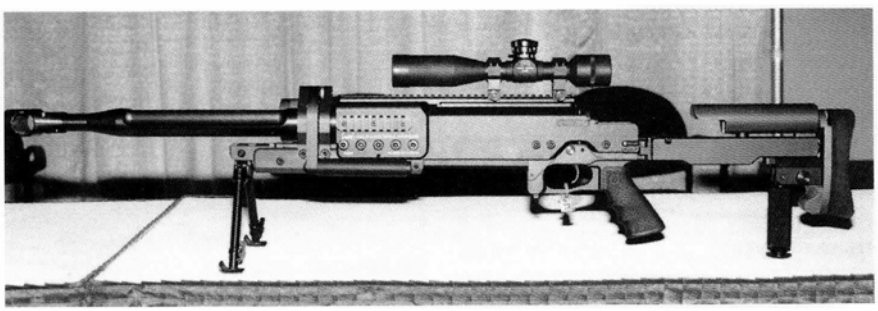
A Nemesis Suppressed model with an Ops Inc sound suppressor is planned.

Description

The Nemesis 12.7 mm sniper rifle is based on the PGM Ultima Ratio sniper rifles, but with the Nemesis the overall scale is enlarged to accommodate the 12.7 × 99 mm (0.50 Browning) cartridge. Using this cartridge the Hecate II is claimed to be highly effective at ranges up to 1,500 m, although performance will depend on the type of ammunition involved.

The modular frame construction of the Ultima Ratio models is retained for the Nemesis although the overall dimensions are enlarged. The magazine capacity is five rounds. The match grade heavy barrel, 700 mm long, is fluted and is fitted with a large single-baffle muzzle brake assembly which is claimed to be so efficient that the recoil forces imposed on the firer are no greater than those produced by a 7.62 mm rifle.

To assist in carrying the Nemesis a collapsible carrying handle is provided. Once the weapon is in the firing position an optional and adjustable stock support can be added under the stock assembly. An adjustable folding bipod is provided.



Nemesis 12.7 mm sniper rifle (T J Gander) ***NEW***/0132066

Specifications
Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: bolt action, single shot
Locking: rotating bolt, 3 front-locking lugs
Feed: 5-round box magazine
Weight: ca 12.7 kg, according to configuration
Length: overall, ca 921 mm
Barrel: 700 mm
Rifling: 8 grooves, rh, 1 turn in 381 mm
Sights: optical, to choice
Max effective range: >1,800 m

Manufacturer
PGM Precision, BP29, F-74334 Poisy Cedex.

Marketed by
FN HERSTAL, Voie de Liège 33, B-4040 Herstal,

Status
Under development.

NEW ENTRY

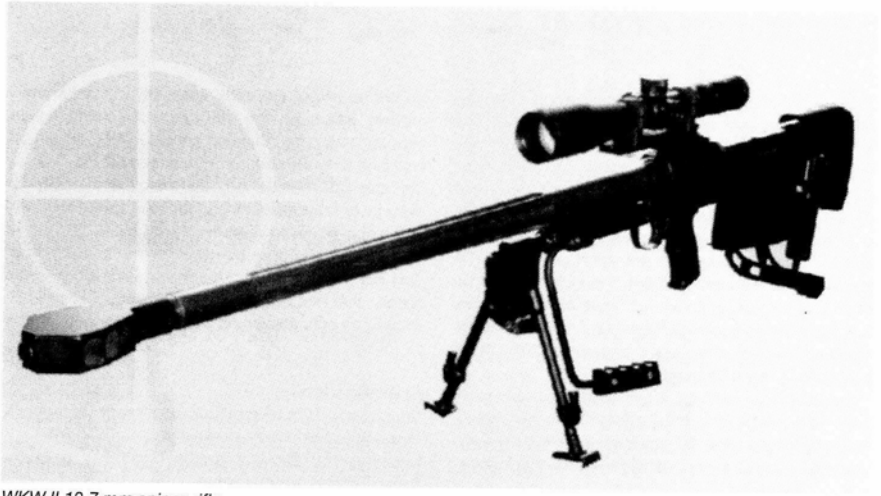
POLAND

WKW II 12.7 mm sniper rifle

Description

The WKW in the designation for the WKW 12.7 mm sniper rifle denotes Wielkokalibrowy Karabin Wyborowy, or Large Bore Sniper Rifle. It was developed to fire 12.7 × 99 mm ammunition to ranges of up to 2,000 m and is a bolt-action rifle with a bullpup layout. The seven-round box magazine is located just in front of the firer's shoulder, with the small buttstock connected by a height-adjustment screw sleeve to a butt-support arm. The front of the rifle is supported by a folding bipod, while a high-efficiency six-port muzzle brake attenuates recoil stresses. Accuracy is assisted by what is described as a new form of trigger mechanism. A carrying handle is provided.

The optical sight specified for the WKW is a Schmidt & Bender × 3-12 P/Mil zoom telescope mounted on a short length of mounting rail above the receiver. There are no iron sights.



WKW II 12.7 mm sniper rifle

NEW/0526031

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: bolt action, single shot
Locking: rotating bolt
Feed: 7-round box magazine
Weight: ca 15.9 kg
Barrel: 880 mm
Sights: Schmidt & Bender × 3-12 P/Mil zoom telescope
Muzzle velocity: 850-900 m/s
Max effective range: >2,000 m

Manufacturer

Zakłady Mechaniczne Tarnów SA., ul Kochanowskiego 30. PL 33-100 Tarnów, Poland.

Status

Available.

NEW ENTRY

RUSSIAN FEDERATION AND ASSOCIATED STATES (CIS)

12.7 mm V-94 (OSV-96) anti-matériel rifle

Development

Information regarding the 12.7 mm V-94 (OSV-96) anti-matériel rifle first became publicly available during 1995. The OSV-96 and V-94 differ mainly in their optical sights, which could be one of a range of modern types, including collimator sights, and the revised outline of the butt-stock. Some changes may be detected in the barrel shroud forward of the receiver. Russian listings make no differentiation between the rifles.

At first sight the overall design resembles that of the 14.5 mm PTRS 1941 anti-tank rifle of the Great Patriotic War years (1941-1945) but the resemblances are superficial for the V-94 (OSV-96) is quite different in many details, not least being the cartridge employed, the 12.7 × 107 mm, although the V-94 (OSV-96) could be modified to accommodate other similar cartridges.

According to promotional literature, potential targets for the V-94 (OSV-96) include parked aircraft, radars, missile launchers and artillery, lightly armoured and soft-skin vehicles, small coastal craft and sea mines, all with emphasis on the fact that it is far more economical to utilise a large calibre sniper rifle against such targets than more costly ordnance.

Reports from Chechnya, where the V-94 was used in action, mentioned that it was too large for the operational environment and for transport. The same reports also mentioned that the firing signature was too loud, while the recoil forces were such that it proved impossible to maintain the optical sight zero.

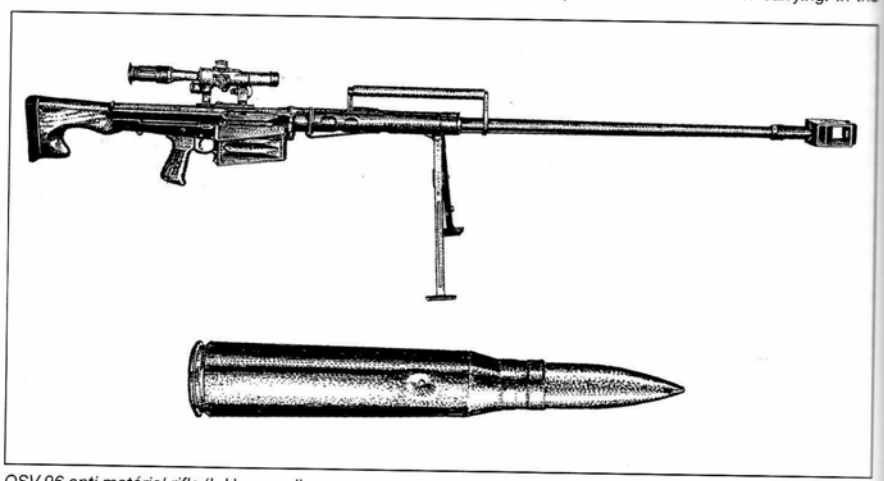
Description

The 12.7 mm V-94 (OSV-96) anti-matériel rifle is a gas-operated single-shot rifle, the most prominent feature of which is the long slender barrel with its large dual chamber muzzle brake device which also reduces firing flash. The muzzle brake is a partial counter to the significant recoil forces produced when firing the 12.7 × 107 mm cartridge, more usually fired from heavy machine guns. The firer is further protected against recoil by a rubber butt-pad. Gas for the self-loading mechanism is tapped off from a point about one third along the length of the barrel. No firm information is available regarding the locking mechanism employed but it is assumed that it is some form of projecting lug bolt operating with a rotary motion.

Ammunition is fed from a five-round box magazine under the receiver. The round quoted in the literature available mentions the B-32, an API with a muzzle velocity of 840 to 850 m/s and a muzzle energy rating of 15,570 J. This provides the V-94 (OSV-96) with an effective range of up to 2,000 m and a 90 per cent chance of penetration of 20 mm against 20 mm armour plate at 100 m.

The OSV-96 has no iron sights so is provided with a compact optical sight – the V-94 has a suitably modified × 13 PSO-1 telescopic sight, the same unit fitted to the 7.62 mm SVD rifle. The sight is removed during moves. A special night sight has been developed to permit night engagements against targets up to 600 m away.

To reduce the overall length of 1.7 m when travelling, the V-94 (OSV-96) can be folded where the barrel meets the receiver assembly. This is accomplished by raising a large locking lever on the right of the receiver, just forward of the ejection port. This allows the receiver and butt to be swung to the right-hand side of the barrel; the bipod folds to the rear for carrying. In the



OSV-96 anti-matériel rifle (L Haywood)

folded state the overall length of the rifle is reduced to 1.1 m, less than the overall length of the SVD sniper rifle. When the rifle is folded the carry handle is over the centre of gravity.

Specifications
Cartridge: 12.7 × 107 mm
Operation: gas, semi-automatic
Feed: 5-round detachable box magazine
Weight: without sight, 11.7 kg
Length: firing, 1.7 m; carry, 1.1 m
Barrel: 1 m
Sights: optical POS 13 x 60; lightweight POS 12 x 56
Muzzle velocity: 820 m/s
Max effective range: against matériel, 2,000 m; against personnel, 1,200 m

Manufacturer
Instrument Design Bureau (KBP), Tula 300001, Russia.

Status
In production. Offered for export sales.

Service
RFAS military forces, Interior Ministry and other RFAS forces.

VERIFIED

SLOVENIA

ALPIMEX APK 12.7 12.7 mm anti-matériel rifle

Description
The ALPIMEX APK 12.7 12.7 mm anti-matériel rifle may be regarded as an APK 20 rifle scaled down to suit the ammunition utilised, but identical in every other respect – see previous entry for details of the APK 20. The APK 12.7 utilises the 12.7 × 99 mm/0.50 Browning cartridge.

Specifications
Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: manual, single shot
Locking: falling block
Feed: single shot
Weight: without sight, 10.4 kg
Length: 1.22 m
Height: without sight, 170 mm
Width: 60 mm
Barrel: 920 mm
Rifling: rh, 1 turn in 381 mm
Sights: optical, to user choice
Muzzle velocity: M33 ammunition, 855 m/s
Muzzle energy: M33 ammunition, 17,180 J

Manufacturer
ALPIMEX SL doo, Pot v puškarno 11, 4000 Kranj.

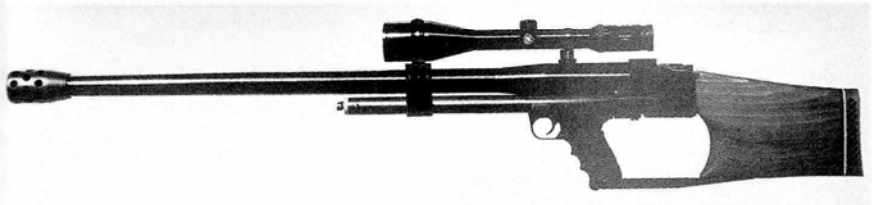
Status
Available.

VERIFIED

ALPIMEX APK 20 20 mm anti-matériel rifle

Description
The ALPIMEX APK 20 20 mm anti-matériel rifle is a single-shot rifle with a falling block action manually operated by a side lever that can be located on either side of the receiver. The cartridge fired is the 20 x 82 mm MG151. What is described as a semi-bullpup layout is used with the pistol grip underneath and just forward of the loading ramp. There is no receiver as such, one post for the optical or night sight mounting being located on top of the heavy barrel. The forward sight is located on a collar around the barrel and an extension tube onto which a bipod can be mounted. There are no iron sights.

Walnut is used for the smoothly-contoured butt-stock, which also has a rubber butt-pad to provide a measure of comfort when firing. Recoil is further reduced by an integral 'pepper pot' muzzle brake.



ALPIMEX APK 20 20 mm anti-matériel rifle 0093156

Specifications
Cartridge: 20 x 82 mm
Operation: manual, single shot
Locking: falling block
Feed: single shot
Weight: without sight, 14.7 kg
Length: 1.24 m
Height: without sight, 180 mm
Width: 60 mm
Barrel: 920 mm
Sights: optical, to user choice

Manufacturer
ALPIMEX SL doo, Pot v puškarno 11, 4000 Kranj.

Status
Available.

VERIFIED

SOUTH AFRICA

PMP NTW 20/14.5 anti-matériel rifle

Development
The NTW 20/14.5 anti-matériel rifle was designed by Tony Neophytou and developed initially under Aerotek auspices. The design then passed to Mkhonto Arms before the total rights were obtained by the Mechem Division of the Denel Group. With the sale of Mechem by Denel, the rights to the NTW 20/14.5 have been acquired by Pretoria Metal Pressings (PMP). The rifle can be readily modified by the user to accommodate two primary ammunition calibres: the 20 × 83.5 mm MG151 cartridge; or the Soviet/RFAS 14.5 × 114 mm in API and API-T form.

In 1998 this rifle was selected by the SANDF who procured all available development models for trials and familiarisation prior to the availability of newly-manufactured rifles. The NTW 20/14.5 has also been procured in substantial numbers by an unspecified South Asian nation.

PMP NTW anti-matériel rifle in 20 mm form ***NEW***/0127806

Description
The 20 mm NTW 20/14.5 rifle is an anti-matériel weapon with many applications, including Explosive Ordnance Disposal (EOD).

In 20 mm form it fires the 20 × 83.5 mm MG151 cartridge fired by the Vektor 20 mm GA1 cannon; the cartridge is produced in South Africa by Pretoria Metal Pressings (PMP). Ammunition natures fired by the NTW 20 include HEI, HEI-T, SAPHEI and Practice. Muzzle velocity is 720 m/s and the operational range is given as up to 1,300 m. In 14.5 mm form the cartridge fired is the Soviet/RFAS 14.5 × 114 mm in API and API-T form; muzzle velocity is 1,080 m/s and maximum effective range 1,800 m.

Changing from one calibre to another takes less than 30 seconds. The barrel, bolt, magazine and sighting equipment can be interchanged between calibres as required.

Rounds are fed into the rifle from a three-round box magazine protruding from the left-hand side of the receiver and providing fuze protection. Spent cases eject to the right as the bolt is withdrawn.

The NTW 20/14.5 Combination is a manual bolt-action rifle with the bolt face employing six locking lugs. Recoil is limited by a large double baffle muzzle brake and a combined hydraulic/pneumatic damping and buffer system. Two hydraulic dampers are available for use in either warm or cold climates. Warm climates are defined as +10 to +60°C and cold climates as –25 to +35°C.

Recoiling parts slide within a chassis frame which includes the butt assembly, so the firer can assume a conventional firing position with the butt held into the shoulder by a grip under the frame and a pistol grip for the adjustable pull and detachable trigger assembly. Right- and left-handed firing positions are possible. The recoiling parts and the barrel can be removed from the chassis frame for maintenance and also for carrying.

The bipod, which provides 15° of traverse each side, is located under the receiver while the barrel securing nut is of the 'accuracy' type and is either loosened or tightened by inserting two cartridge base rims into slots in the nut for the final twist movement. In addition, the handgrip under the butt can be lowered to act as a monopod. Captive take-down pins are used during field stripping.

The optical sight used is a long eye relief (250 mm) 8 × 42 scope with parallax adjustment and a rapid detachable mount. The scope mount is fitted with the Strydom Elevation Drum which enables the firer to go through the full range without readjusting the scope once it has been zeroed at short range.

The rifle may be carried on two special backpack harnesses, one load weighing 12 kg and the other 15 kg. One pack carries the frame, stock, butt and bipod while the other carries the barrel, sighting equipment and magazines.

PMP NTW anti-matériel rifle in 20 mm form 0037087

A further modification of the NTW rifle involves the provision of suitable barrels and other components to allow the rifle to fire either 12.7 × 99 mm (0.50 Browning) or 12.7 × 107 mm ammunition.

Specifications

20 mm version
Cartridge: 20 × 83.5 mm MG151
Operation: manual bolt action
Locking: 6 lugs
Feed: 3-round box magazine
Weight: 26 kg
Length: 1.795 m
Rifling: 1 turn in 560 mm
Barrel: 1 m
Sights: telescopic, long eye relief (250 mm), 8 × 42
Muzzle velocity: 720 m/s
Muzzle energy: 28,500 J
Max effective range: >1,300 m
14.5 mm version
Cartridge: 14.5 × 114 mm
Operation: manual bolt action
Locking: 6 lugs
Feed: 3-round box magazine
Weight: 29 kg
Length: 2.015 m
Barrel: 1.22 m
Rifling: 1 turn in 406 mm
Sights: telescopic, long eye relief (250 mm), 8 × 42
Muzzle velocity: 1,080 m/s
Muzzle energy: 30,675 J
Operational range: >1,800 m

Manufacturer

Pretoria Metal Pressings (PMP), a Division of Denel, Church Street Extension, Pretoria West. Private Bag X334, Pretoria 0001.

Status

In production.

Service

South African National Defence Force (SANDF) and an unspecified South Asian nation.

UPDATED

Truvelo Armoury 12.7 mm Mega Sniper anti-matériel rifle

Development

The 12.7 mm Mega Sniper anti-materiél rifle is a member of the array of high precision rifles produced by the Truvello Armoury under the general family name of SG1 (Scharfschützen Gewehr 1). It is therefore available in either single-shot or magazine-fed forms as a 'no compromise' design intended to provide accuracy of the order of 1 Minute Of Angle (MOA) at 500 m using suitable ammunition.

Description

The 12.7 mm Mega Sniper anti-matériel rifle is constructed along the same lines as the other rifles in the SG1 family (see entry in Rifles section) other than that the bolt lengths differ between the single-shot and magazine-fed models; the magazine-fed rifle bolt action is longer. In both cases the bolt actions are computer-machined from solid EN24 steel (equivalent to 817M40) with two forward locking lugs and another at the rear. The standard box magazine holds five rounds although other capacities can be produced.

The barrel is manufactured using EN19 steel (equivalent to 709M40), button rifled to give a smooth and work hardened inner surface for consistency and accuracy. A muzzle brake, claimed to reduce recoil by 50 per cent, is fitted as standard.

The stock is machined from aircraft grade aluminium and is adjustable in length. The butt stock has a rubber butt pad adjustable for height. A grip for the free hand is provided, as is a cheek piece. A folding bipod is adjustable for height. The polymer pistol grip is adjustable for trigger reach. The design is intended for use by right- or left-handed users and can be configured accordingly.

Magazine version of Truvelo Armoury 12.7 mm Mega Sniper anti-matériel rifle (T J Gander) 0087882

No iron sights are provided while the choice of optical sight is left to the user's discretion. Optical sights can be mounted on a MIL-STD-1913 rail secured over the receiver, although other optical mounts can be provided.

The following specifications should be taken as a general guide only.

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: manual bolt action
Locking: 2 lugs on bolt head, 1 at rear
Feed: single-shot or 5-round box magazine (according to model)
Weight: 16 kg
Length: overall, 1.51 m
Barrel: 1 m
Rifling: 8 grooves
Sights: optical only, user selection
Max effective range: 1,200 m

Manufacturer

Truvelo Armoury Division, PO Box 14183, Lyttelton 0140.

Status

Available.

VERIFIED

Status
Available.

Service
Canadian Forces and Denmark.

UPDATED

Diemaco 0.22 LR Small Bore Cadet rifle and conversion kit

Armament Technology AT1-M24 7.62 mm Tactical Rifle

Description

The AT1-M24 Tactical Rifle is an updated and upgraded version of the US Army's M24 sniper weapon system. It is built on a modified Remington Model 700 short action that has been modified to provide superior overall performance. All components are precision machined to ensure smooth, reliable operation under the most severe operating conditions.

Barrels are 416R stainless steel with 5R hook-cut rifling. Twist rates are optimised for use with the heavy bullets which are the norm for long-range shooting. Accuracy of the AT1-M24 is warranted by the manufacturer to be less than a minute of angle across the rifle's effective range when new, although rifles generally average under half minute of angle accuracy. Barrel life of the AT1 typically runs to at least 10,000 rounds before replacement is required. Stocks are Kevlar reinforced composite with full-length aluminium bedding blocks and are supplied in a choice of colours with a textured finish. Stocks are available with adjustable comb and length of pull. The bipod allows 15° of cant, has adjustable damping and can be attached and removed without tools.

Telescope mounts are to NATO standard, quick detachable and can be remounted without loss of zero. Auxiliary sighting systems, suppressors, tool kits and deployment kits are available to customer specification.

A variant, the AT1M, is chambered for 0.300 Winchester Magnum ammunition.

Armament Technology AT1-M24 7.62 mm Tactical Rifle 0008606

Specifications

Cartridge: 7.62 × 51 mm NATO; AT1M, 0.300 Winchester Magnum
Operation: bolt action
Feed: AT1, internal box magazine; AT1A, 5- or 10-round detachable box magazine
Weight: 6 kg, standard stock
Length: 1.15 m
Barrel: 660 mm
Rifling: 5 grooves, 5R profile rh twist, 1 turn in 286 mm
Trigger: single stage, adjustable 1.5-3 kg
Sights: optical, to customer specification

Manufacturer

Armament Technology, 3045 Robie Street, Suite 113, Halifax, Nova Scotia.

Status

Available.

Service

Numerous police and marksmanship training agencies.

UPDATED

CHINA, PEOPLE'S REPUBLIC

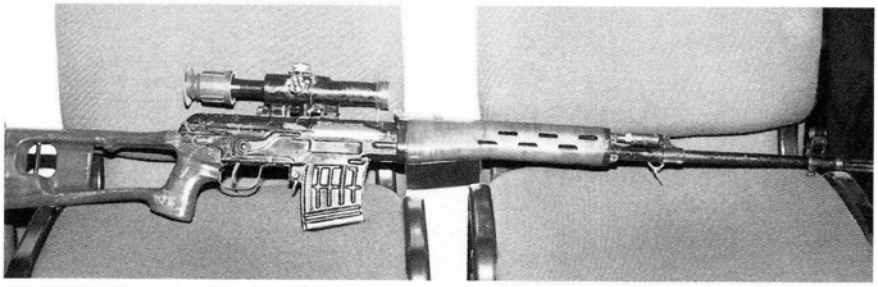
NORINCO 7.62 mm Type 79 sniper rifle

Description

The NORINCO 7.62 mm Type 79 is a precise copy of the Soviet/RFAS SVD Dragunov sniper rifle, except that the butt is slightly shorter. It is equipped with a × 4 magnification optical sight that is a copy of the Soviet/RFAS PSO-1 and has the same ability to detect infra-red emissions.

Specifications

Cartridge: 7.62 mm × 54R (Type 53)
Operation: gas, short-stroke piston, self-loading
Feed: 10-round box magazine
Weight: rifle only, 3.8 kg; with optical sight, 4.4 kg
Length: 1.22 m
Barrel: 620 mm
Rifling: 4 grooves, rh, 1 turn in 254 mm
Sights: fore, adjustable post; rear, U-notch, tangent; × 4 optical sight



NORINCO 7.62 mm Type 79 sniper rifle (T J Gander) ***NEW***/0116673

Sight radius: 585 mm
Sight range: iron, 1,200 m; optical, 1,300 m
Muzzle velocity: 830 m/s

Manufacturer

China North Industries Corporation (NORINCO), 12A Guang'anmen Nanjie, Beijing.

Status

In production. Offered for export sales.

Service

Chinese armed forces.

UPDATED

UKRAINE

Tasko 12.7 mm sniper rifle

Description

The Tasko 12.7 mm sniper rifle is more accurately termed an anti-matériel rifle as it fires the 12.7 × 107 mm round and is claimed to be effective against vehicle-sized targets at up to 2,000 m; the maximum anti-personnel range is given as 1,200 m. The rifle is gas-operated and fires on single shot, semi-automatic only with a maximum firing rate of 10 to 15 rds/min. Ammunition is fed from a 5- or 10-round box magazine.

Tasko 12.7 mm sniper rifle (T J Gander) ***NEW***/0106199

An adjustable bipod is attached directly onto a lug at the forward end of the receiver. The heavy barrel is provided with a large multi-baffle muzzle brake to reduce recoil. The top of the receiver has provision for an optical sight which can be varied to suit the user. It is also possible to mount a special night sight with an effective operational range of 600 m under night conditions. A carrying handle is provided. The original telescopic single-strut butt-stock has been replaced by a more conventional wooden item with a butt plate and cheek rest that can be adjusted in length to suit the individual firer. It is probable that the single-strut butt-stock, that can also be folded to the side for transport, remains an option.

Specifications

Cartridge: 12.7 × 107 mm
Operation: gas, semi-automatic
Feed: 5- or 10-round box magazine
Weight: without sight, 12 kg
Length: stock folded, 1.09 m; stock extended, 1.54 m
Sights: optical, to user choice; night sights available
Max effective range: 2,000 m

Manufacturer

Korporatsiya Tasko, 5-a building, 5, Dymytrova Street, Kiev.

Status

Available.

UPDATED

UNITED KINGDOM

Accuracy International 12.7 mm AW50F anti-matériel rifle

Development

The Accuracy International 12.7 mm AW50 anti-matériel rifle was announced in early 1998, although at that time it was still at the advanced development stage. The first examples of the production version, the AW50F, appeared during mid-1999 for deliveries starting in October 1999; they differed from the original design in several respects, due mainly to measures taken to reduce weight. The overall design of the AW50F follows from that of the smaller calibre Accuracy International sniper rifles, so many construction and other features are carried over.

At the end of March 2001, it was announced that the AW50F had been selected for use by special forces units and selected elements of infantry battalions of the Australian Army. The initial requirement was for 94 units, along with a variety of associated equipment and ammunition.

Description

The Accuracy International 12.7 mm AW50F anti-matériel rifle fires all types of 12.7 × 99 mm (0.50 Browning) ammunition. The AW50F is a six-lug, bolt-action rifle fed from a detachable five-round box magazine. The aluminium and steel receiver is held in an alloy chassis and has an integral anti-recoil system. The heavy barrel is stainless steel and has a high efficiency muzzle brake. Felt recoil is further reduced by the provision of a soft butt pad.

A folding butt-stock is standard on the AW50F, as is the adjustable third support leg under the stock to add to the stability of the fully adjustable, folding bipod when aiming. Four sling loops are provided for hand and shoulder sling carriage as well as the fitting for a back harness.

Accuracy International 12.7 mm AW50F anti-matériel rifle (T J Gander) 0054733

The sighting system, fixed by a one-piece mount to a MIL-STD-1913 rail, would normally be a variable × 3 to × 12 MKII Mil with AI Mil Dot reticle day sight with 0.2 milrad clicks and elevation to 1,500 m; laser protection is provided. Iron sights for emergency use are optional. Night sights, such as the Simrad KN series or Hensoldt NSV 80, can be optional, dedicated or complementary.

The AW50F can be supplied in a metal case containing spare magazines, a sling, and maintenance kits. A padded soft case is available for carrying the folded rifle on a sling harness over the back.

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: bolt action, single shot
Locking: 6 front-locking lug bolt
Feed: 5-round detachable box magazine
Weight: complete, 13.64 kg
Length: butt folded, 1.12 m; butt extended, ca 1.35 m
Barrel: 686 mm
Rifling: rh, 1 turn in 381 mm
Sights: see text
Max operating range: 1,500 m

Manufacturer

Accuracy International, PO Box 81, Portsmouth, Hampshire PO3 5SJ.

Status

In production.

Service

Selected by Australian Army (94), Germany and various special forces.

UPDATED

UNITED STATES OF AMERICA

ArmaLite 0.50 AR-50 rifle

Description

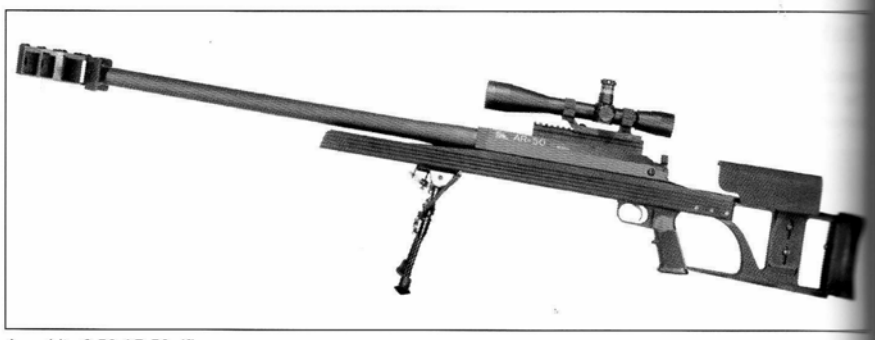
The ArmaLite AR-50 is a single-shot rifle designed as a lightweight, convenient and accurate long-range rifle. The receiver is octagonal in cross-section and bedded into a sectional aluminium stock. The stock itself is in three sections: an extruded fore-end; a machined grip frame with a vertical grip; and a machined butt-stock (the butt-stock is removable for transport). The butt-plate is vertically adjustable, as is a cheek rest.

Three bolt locking lugs allow for a decreased lift angle of the bolt handle. The extractor is of the Sako type with ejection accomplished by a spring-loaded plunger. What is described as a multiflute recoil check is fitted over the muzzle to reduce recoil to a 'very moderate' level.

There is a MIL-STD-1913 rail for mounting standard optical and other sights. Finish is phosphated steel and hard anodised aluminium.

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: manual, bolt action



ArmaLite 0.50 AR-50 rifle 00879

Locking: rotating bolt, 3 lugs
Feed: single shot
Weight: 19.05 kg
Length: 1.4986 m
Barrel: 787.4 mm
Rifling: 8 grooves, rh, 1 turn in 305 mm
Sights: user choice; MIL-STD-1913 rail mount
Max effective range: 2,000 m

Manufacturer

ArmaLite Inc, PO Box 299, Genesco, Illinois 61254.

Status

In production.

UPDATED

Barrett 0.50 Model 82A1 and Model 82A1M rifles

Development

The Barrett 0.50 Model 82A1 is a semi-automatic rifle firing the 12.7 × 99 mm (0.50 Browning) heavy machine gun cartridge. It is intended as an Explosive Ordnance Disposal (EOD) and long-range interdiction weapon and is suggested as having uses in military and police employment and also as a suitable defensive weapon for ocean-going light craft.

The Model 82A1 has been joined by the Model 82A1M intended specially for military operations – see under Variant for details.

The US Marine Corps had adopted a variant of the Model 82A1M known as the Model 82A3. This is identical to the Model 82A1M other than the scope rail, which is higher to accommodate special optical devices.

The Model 82A1NG is a variant produced for Norway.

Description

The Barrett 0.50 Model 82A1 rifle operates on short recoil principles. Upon firing, the bullet is forced through the barrel and considerable case-head thrust is delivered to the bolt face. This thrust transfers through the bolt lugs to the barrel extension and through the bolt body to the rear of the bolt carrier. The transfer to the carrier is unique to this design and dissipates much of the firing shock which might otherwise damage the locking assembly.

The barrel has recoiled approximately 13 mm when the bullet leaves the barrel. The barrel, bolt and bolt carrier continue to the rear under recoil, during which movement the cocking lever withdraws the firing pin and recocks it. At 25 mm of recoil travel, an accelerator arm strikes an abutment in the receiver and swings forward, forcing the accelerator rod to separate the bolt carrier and the barrel extension. This action serves to rotate the bolt out of engagement with the barrel extension and to transfer energy from the barrel to the bolt carrier. The barrel continues to the rear for a total of 53 mm, stopping when a key, locked into a recess in the barrel, strikes the barrel stop. The bolt carrier continues to move under its own momentum and begins to separate from the barrel. A cam pin in the carrier, engaged in a helical cut in the bolt, causes the bolt to rotate 30° during the separation of carrier and barrel, thus moving the bolt locking lugs out of engagement with the barrel extension. At this point the bolt is fully extended from the carrier and the locking recess on the bolt body has been rotated so that a bolt latch, mounted in the carrier, engages to lock the bolt in the forward position.

As the carrier pulls the bolt to the rear, the fired cartridge case is withdrawn from the chamber and, as it clears the barrel extension the case is expelled from the weapon by the ejector. As soon as the bolt is free of the barrel extension, the barrel return springs restore the barrel to the forward battery position. The bolt carrier, having compressed the main return spring housed in the butt-stock, bottoms the buffer against the rear of the housing. The return spring then forces, the bolt carrier forward, stripping a new cartridge from the magazine and chambering it. As the carrier moves forward, the bolt latch is pivoted out of engagement with the bolt body by the pressure of the bolt latch trip, allowing the bolt to retract and rotate when it meets the breech face, locking the lugs into engagement with the barrel extension.

The barrel is fitted with a new high-efficiency muzzle brake, which reduces the recoil by 65 per cent. There is an adjustable bipod and the rifle can also be mounted on small and large socket mounts with the use of the pintle adaptor, called the 'soft mount'.

The Model 82A1 is fitted with iron sights and a × 10 telescope, employing a ballistic reticle calibrated to the recommended ammunition types. The reticle allows adjustment of the point of impact from 500 to 1,800 m, considered to be the maximum effective range when using standard Browning ammunition.

The manufacturers recommend using the APEI multipurpose cartridge, but the rifle is capable of firing any standard 12.7 × 99 mm/0.50 Browning machine gun ammunition. The preferred standard types are APHCI and AP M8.

Accessories include a backpack soft carrying case and a Barrett Soft Mount for mounting on M3 or M122 tripods and land or water vehicles. The Soft Mount is stainless steel and weighs 3.6 kg.

Barrett 0.50/12.7 mm Model 82A1M rifle ***NEW***/0120175

Variant

Model 82A1M

The Model 82A1M was designed specially for military operation and, unlike the Model 82A1, will not be sold to private users. It has been adopted by the US Army in preference to the bolt-action Model 95 (XM107) due to its greater potential firepower. One of the main changes on this model is that, by removing a barrel-retaining key, the barrel can be telescoped into the upper receiver to reduce the carry length so that it can be transported inside a hard carry case.

For its intended military role, the Model 82A1M has the following changes:

A monopod at the rear of the buttstock;

A rear grip to assist in stabilising the rifle;

A 485 mm long MIL-STD-1913 rail mount with numbered slots for optical sights and other accessories;

A removeable 69 per cent recoil reducing muzzle brake of a new design held in place by screws and washers;

A lightweight bolt carrier;

New open sights calibrated to match the ballistics of the Nammo Raufoss Mark 211 round, with several scales available to suit various types of ammunition;

A quick-release short bipod with spiked feet.

Specifications

Model 82A1M
Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: short recoil, semi-automatic
Locking: rotating bolt
Feed: 10-round detachable box magazine
Weight: empty, 14 kg
Length: overall, 1.45 m; reduced, 965 mm
Barrel: 736.6 mm
Sights: × 10 telescope; iron sights with rear sight calibrated from 100 to 1,500 m
Muzzle velocity: M33 Ball, 853 m/s
Max effective range: 2,000 m

Manufacturer

Barrett Firearms Manufacturing Inc, PO Box 1077, Murfreesboro, Tennessee 37133-1077.

Status

In production.

Service

US Marine Corps, Air Force, Army – EOD, Special Forces. In service with 34 other countries including Bahrain, Belgium, Bhutan, Botswana, Chile, Denmark, Finland, France, Greece, Italy, Kuwait, Jordan, Mexico, the Netherlands, Norway (M82A1NG), Oman, the Philippines, Portugal, Qatar, Saudi Arabia, Singapore, Spain, Sweden, Turkey, United Arab Emirates and the UK (L82A1).

UPDATED

Barrett 0.50 Model 95M bolt-action rifle (M107)

Development

Introduced in January 1990, the Barrett 0.50 Model 90 bolt-action rifle was developed into the Model 95, intended for potential users who prefer a bolt-action weapon. The alteration of the mechanism was accompanied by other modifications, resulting in a shorter and lighter weapon than the semi-automatics.

In April 1999, the Model 95 was adopted in a slightly modified form by the US Army and designated the XM107 prior to final certification testing and type classification as the M107. Following a change of policy, the US Army decided to adopt the Barrett Model 82A1M (see separate entry) instead, due mainly to its improved potential firepower. Many details derived from the development of the XM107 have been incorporated into the Model 95M

Description

The Model 95M is a bullpup design, with the action well back in the stock and with the pistol grip ahead of the magazine. A new high-efficiency muzzle brake has been fitted, and this, together with a 'Sorbothane' butt-pad, reduces the felt recoil to a manageable level.

The Barrett 0.50 Model 95M, and before it the Model 95, is an overall design improvement on the Model 90. They differ in several respects from the earlier model.

Hard chrome was added in the chamber area to assist fired case extraction and prevent chamber corrosion. The trigger housing was relocated approximately 25 mm forward, allowing more firing hand clearance to the magazine and providing more room to insert the magazine. The sear was also lengthened by 25 mm to allow for the relocation of the trigger housing. In addition the magazine-well front end was redesigned to a more sloping angle to ensure there is no contact with the firing hand. On the Model 95M a new handgrip mounted onto the receiver brace serves to protect the magazine catch from accidental disengagement.

The bolt handle was redesigned to angle down and to the rear. This reduces the occasional binding of the bolt carrier to the carrier rails and allows a clearer path for ejected cases. The ejection spring tension was reduced for easier chambering while the ejector was lengthened for more push duration on the fired case during the ejection cycle. The bolt carrier firing pin spring pocket was deepened by 76.2 mm to allow longer firing pin springs, but with less compression. In addition, the cocking piece was changed to allow for 2.54 mm more firing strike for a total of 76.2 mm, resulting in more positive ignition under adverse conditions.

The Barrett Model 95M is manufactured with the receiver in upper and lower portions, with the barrel an integral component of the upper half. A barrel nut is added to support the barrel and improve accuracy. The Model 95M is disassembled for maintenance via two pins, allowing the shortened rifle to be placed in a special 'drag bag' for parachute operations or transport and rapidly reassembled when necessary. There is a 284 mm long MIL-STD-1913 rail mount for optical sights and back-up open sights. The quick release spiked bipod assembly is the same as that used on the Barrett Model 82A1M.

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: bolt action, single shot
Feed: 5-round box magazine
Weight: empty, 9 kg
Length: 1.143 m; disassembled, 860 mm
Barrel: 736.6 mm
Muzzle velocity: M33 Ball, 853 m/s
Max effective range: 2,000 m

Manufacturer

Barrett Firearms Manufacturing Inc, PO Box 1077, Murfreesboro, Tennessee 37133-1077.

Status

In production. In service with 15 countries.

UPDATED

Barrett 0.50 Model 95M bolt-action rifle ***NEW***/0120172

Barrett 0.50 Model 99 bolt-action rifle

Description

The Barrett Model 99 is similar to the Model 99 other than the fact that it is a single-shot-only rifle. It is intended as a less expensive alternative to the company's magazine-fed rifles.

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: manual bolt action, single shot
Locking: rotating bolt
Feed: single shot
Weight: 11.3 kg
Length: 1.28 m
Barrel: 838 mm

Manufacturer

Barrett Firearms Manufacturing Inc, PO Box 1077, Murfreesboro, Tennessee 37133-1077.

Status

In production.

VERIFIED

Barrett 0.50 Model 99 bolt-action rifle (C Cutshaw) 0055866

EDM Arms 0.50 Windrunner tactical takedown rifle

Description

The EDM Arms 0.50 Windrunner tactical takedown rifle was designed to provide an easily transportable anti-matériel rifle. It is a bolt action, magazine-fed rifle that can be disassembled into five major sub-assemblies for transportation. Disassembly can be done in less than 60 seconds and without the use of tools. The overall length after disassembly is less than 812 mm.

The receiver is CNC machined from a single billet of 4140 chrome molybdenum standard hardened to 4042 Rockwell. There is a machined MIL-STD-1913 rail for mounting optical devices. The barrel is manufactured by K & P and is fluted for stiffness and heat dissipation and is secured to the receiver by an Uzi-pattern threaded nut and self-locking ratchet that prevents it from backing off. The muzzle brake is of the pepper pot type and is threaded onto the barrel. The brake has 80 holes at an angle of 80°.

The stock is adjustable for length of pull by sliding on rails and is provided with a moulded steel cheekrest. The butt has a rubber recoil pad. A rear monopod folds into the butt-stock and an M14 type bipod is provided as standard.

A similar rifle chambered for 0.338 Lapua ammunition is also available. There is also a 0.50 tactical takedown rifle known as the Windrunner Model SS.99. For this, there is no magazine and the weights is approximately 14.5 kg with an optical sight.

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: manual, bolt action
Locking: rotating bolt
Feed: detachable 5-round box magazine
Weight: 15.4 kg
Length: complete, ca 1.2 m; carried, ca 812 mm
Barrel: 762 mm
Sights: user choice; MIL-STD-1913 rail mount

Manufacturer

EDM Arms, 1653 Plum Lane, Redlands, California 92374.

Status

Available.

NEW ENTRY

McMillan Bros 0.50 Tactical bolt-action rifle

Description

The McMillan Bros 0.50 Tactical bolt-action rifle is available in single-shot and five-round detachable box magazine forms. Both models are otherwise identical, having their receivers machined from high grade bar-stock steel. A Remington type trigger is set at 1.587 kg; other triggers are optional. An adjustable height folding bipod is secured to the front of the stock, with special 'low profile' models available. The barrel is set in a McMillan glass fibre stock complete with pistol grip and a detachable butt stock and butt spacer system. A high efficiency muzzle brake is located on the end of a fluted match grade barrel, with a stainless steel barrel as an option. No iron sights are fitted, while the optical sights involved depend on customer requirements or preferences.

The McMillan 0.50 Sporter model is identical to the Tactical model apart from a conventionally styled stock. Bench rest versions for target shooting are also available.

McMillan Bros 0.50 Tactical bolt-action rifle ***NEW***/0132696

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: manual, both action
Feed: single shot or 5-round detachable box magazine
Weight: less optics, ca 11.3 kg
Barrel: 736.6 mm

Manufacturer

McMillan Bros Rifle Company, Inc, 1638 West Knudsen Drive, #102, Phoenix, Arizona 85027.

Status

In production.

NEW ENTRY

RAD 12.7 mm M600 and M650 SLAMR anti-matériel rifles

Description

SLAMR stands for Special Light Anti-Matériel Rifle. The RAD 12.7 mm M600 and M650 differ mainly in their magazine capacity, the M600 being a single-shot rifle while the M650 contains seven rounds in a rotary sprocket magazine.

The RAD M600 and M650 SLAMR both fire the 12.7 × 99 mm (0.50 Browning) cartridge, delivering accurate fire to ranges of up to 1,830 m (2,000 yards).

Both rifles have a similar frame-type construction with the heavy barrel secured directly into the receiver with no other form of support. The rifling twist for the barrels is described as 'Classified' and both rifles feature a large double-port muzzle brake; the barrel on the M650 is slightly shorter. For ease of transport or concealment both rifles can be stripped down without the use of tools. On both rifles the butt stock is fully adjustable.

Both rifles can utilise a variety of optical sights, including night sights, although the standard scope is a Leupold Ultra Mark IV × 16.

Specifications

Data for M600, where M650 differs, shown in parentheses
Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: manual, single shot
Locking: manually-operated bolt
Feed: manual, single shot (7-round rotary sprocket magazine)
Weight: with scope and mounting, 10.43 kg (13.52 kg)
Length: 1.384 m (1.448 m)
Barrel: 813 mm (762 mm)
Sights: Leupold Ultra Mark IV × 16 scope

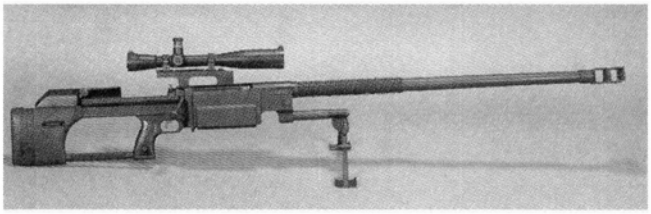
Manufacturer

Redick Arms Development, LLC, PO Box 1208, Fayetteville, Arkansas 72702.

Status

Available.

UPDATED



RAD 12.7 mm M600 SLAMR anti-matériel rifle 0037089

RAD 12.7 mm M650 SLAMR anti-matériel rifle 0037090

RAD 14.5 mm M614 heavy anti-matériel rifle

Development

By Redick Arms Development LLC to provide a long-range anti-matériel rifle with capabilities greater than those of smaller calibres.

Description

The RAD M614 is a 14.5 mm single-shot, bolt-action heavy precision rifle that breaks down into lightweight components, without tools, for transport. The stock is adjustable for length of pull over a range of 76 mm and the receiver will accommodate any standard optics or night vision devices. The rifle surpasses MIL-STD-810 requirements. Accuracy is currently limited to one minute of angle (MOA) due to ammunition quality. The rifle is provided with a Pelican hard rifle case as standard.

RAD M614 14.5 mm heavy anti-matériel rifle
0037210

Specifications

Cartridge: 14.5 × 114 mm
Operation: manual, single-shot bolt action
Locking system: rotating bolt
Feed: manual, single shot
Weight: with optics installed, 20 kg
Length: 1.78 m
Barrel: 1.143 m
Sights: Leupold Ultra Mark IV × 16
Muzzle velocity: nominal, 975 m/s
Max effective range: 3,000 m
Max range: 7,000 m

Manufacturer

Redick Arms Development, LLC, PO Box 1208, Fayetteville, Arkansas 72702.

Status

In production. Available.

UPDATED

Robar 0.50 RC-50 and RC-50F bolt-action rifles

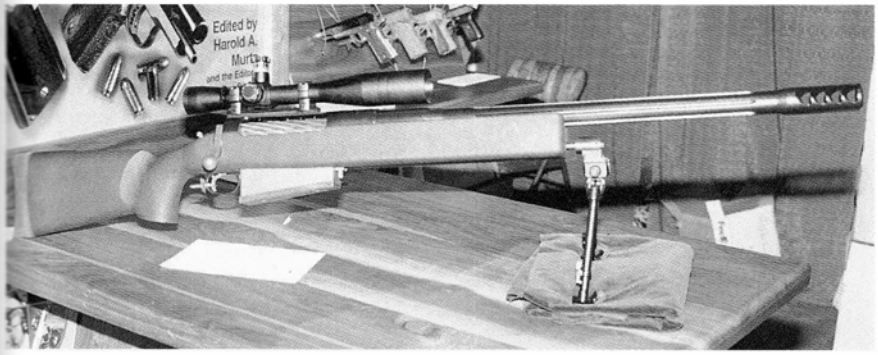
Description

Although the Robar 0.50/12.7 mm RC-50 and RC-50F bolt action rifles were originally developed for the high precision target shooting market, it's use has spread to numerous special operations units and various overseas military and police forces.

The RC-50 is a conventional bolt action rifle with a detachable five-round box magazine. The action is machined from solid bar stock and is allied to a match grade barrel with a high efficiency muzzle brake stated to produce low levels of recoil, with the levels further attenuated by a Pachmayr decelerator recoil pad. The action is used with a modified Remington pattern trigger mechanism with a recommended 1.13 kg release. A conventionally-shaped McMillan glass fibre/composite stock is used, with a Parker Hale pattern folding bipod secured to the front of the forestock on a stud. The barrel is free floating in a channel in the stock.

The RC-50F is exactly the same as the RC-50 apart from having the butt folding to the left for carrying. When in the firing position the stock is held rigid by a screw-actuated mortice block arrangement.

Iron sights are not provided, the choice of optical sight being left to the user. A machined Weaver type sight mounting is provided.



Robar 0.50 RC-50 bolt-action rifle (T J Gander) ***NEW***/0132675

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: manual, both action
Feed: 5-round detachable box magazine
Weight: less optics, ca 11.34 kg
Barrel: 736.6 mm

Manufacturer

Robar Companies, Inc, 21438 North 7th Avenue, Phoenix, Arizona 85027.

Status

In production.

NEW ENTRY

Stoner SR-50 0.50 semi-automatic long-range rifle

Description

The Stoner SR-50 0.50/12.7 mm semi-automatic long-range rifle was introduced during 1996. It operates using direct gas operation and feeds from a horizontal 10-round steel box magazine inserted from the left side of the tubular steel receiver. It is claimed that horizontal feeding provides greater reliability in heavy calibre rifles and allows the firer to assume the lowest possible shooting position without the risk of the weapon resting on the magazine. Positioning the feed in this manner also minimises the receiver length.

Firing is from a locked breech via a two-lug rotating bolt with recoil reduced by a multiport muzzle brake. The barrel can be removed for cleaning and/or transport. Field stripping is said to be intuitive and training can be rapid due to a minimum of components. An M16 safety lever is provided, as is a two-stage target type trigger mechanism. An M60 pattern bipod supports the weapon.

Various optical sights may be employed with the SR-50 although the Leupold Mark 4 × 10 M1 scope with KAC 30 mm steel ring mounts is standard.

Stoner SR-50 0.50 semi-automatic long-range rifle with Leupold Mark 4 × 10 M1 scope (C Cutshaw) 0055863

Specifications

Cartridge: 12.7 × 99 mm (0.50 Browning)
Operation: gas operation, semi-automatic
Locking: two-lug rotating bolt
Feed: detachable 10-round box magazine
Weight: with optical sight and mounts, 13.6 kg
Length: overall, 1.47 m; disassembled: receiver group, 910 mm; barrel group, 910 mm
Barrel: 902 mm
Rifling: 8 grooves, rh; 1 turn in 381 mm
Sights: Leupold Mark 4 × 10 M1 scope with KAC 30 mm steel ring mounts

Manufacturer

Knight's Armament Company, 7750 9th Street SW, Vero Beach, Florida 32968.

Status

In production.

VERIFIED

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